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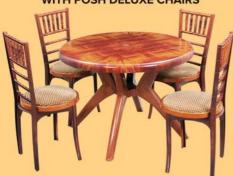
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Editorial

PLASTICS INDIA

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

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Phone: 2329 8856-57, Fax: 2329 8858

E-mail: cdc@cdcprinters.com Editor: Manish Kr Bhaia

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8B, Royd Street, 1st Floor Kolkata - 700 016 (INDIA), Phone: 2217 5699 / 5700 / 6004 Telefax: 91-33-2217 6005 Email: office@ipfindia.org

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Dear Friends,

In India, entrepreneurial attitude still is in a infancy stage. Our industrial & social convention still gives lot of credit to steady and stable career path, an aversion to failure & not to try out unknown pastures.

Hence, a small proportion of the educated youngsters opts for entrepreneurship as a way of life. Those who still tread this path, it is mostly clustered around businesses that are more conventional, predictable and stable. There are very few who go the unconventional

Worldover, 80 % of the brilliant ideas are implemented by the first class entrepreneurs or in todays lingo "STARTUP's. Hence for us to grow, we need to instill the confidence in the mind set of the youngsters that walking alone will give stupendous results. The primary area of focus has to be: Education for all. For the "Young", "Not So Young" and "Not Young" If we look at the growth of the developed countries, we can easily draw a theorem where we have to use the nurture factor. For the Young, the education programme should be such that it allows the young mind to think on own and experiment with ideas rather than read about what has been done.

For the Not So Young, our Indian industries are not working in close association with the institutions, laboratories and large Research & development centers. There is hardly any flow of ideas or talent between the universities or research lab and applied research in business. This absence of interaction is causing lot of brains to leave the country and see their ideas germinating in other countries.

For the Not Young, I believe that entrepreneurship sees no age. If they can use their wisdom and experience and do farming of young entrepreneurs, I see that they would be the one whose contribution to the society would be invaluable. Here is my small piece of advice/ request to the very young entrepreneurs." If you can find a real guide, your energy can be harnessed at least 10 times faster and stronger because wisdom can only come with age.

The discipline and the checks and balances imposed by formal structures are very necessary. But so is the need to retain the spirit of entrepreneurship.

I welcome all of you to attend the truly international show, our own INDPLAS 15 and witness the magic of plastic & convert your plastic into your wealth.

WELCOME TO INDPLAS 15 from 27th Nov to 30th Nov 2015.

Cheers

Warm Regards,

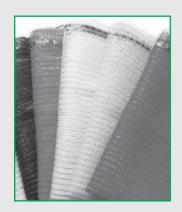
Manish Kr. Bhaia

Editor

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PRESIDENTIAL ADDRESS

RESIDENTIA ADDRESS

Dear Friends,

This is my second last message to you as President of IPF. My term will end in December 2015 when a new committee will be elected to run the Federation. My term also concludes with the largest exhibition IPF has held in its history. With over 5500 sq. m. space booked and 36 exhibitors from

China itself, Indplas' 15 has been a genuinely international exhibition. Previous Indplas exhibitions also had foreign participants but their numbers where much less. In our previous exhibition we had around 10 foreign exhibitors only. This time it will be around 50. In this issue I am writing a few lines on plastic waste and environment.

Rising proportion of plastic packaging waste in municipal solid waste has caused increasing environmental concerns, which in turn has led to various regulations targeting reducing the amount generated. Plastics users are demanding products that reduce environmental impact while improving performance, functionality and value. As a result, significant progress has been made in the development of biodegradable plastics, largely from renewable natural resources, with similar functionality to conventional polymers. These materials offer several environmental benefits and are expected to contribute to sustainability and reduction in the environmental impact associated with disposal of conventional polymers. Several leading food and beverage manufacturers have recently adopted bioplastics packaging that are degradable, compostable and have limited environmental impact.

A company in USA has manufactured a carton using plant-based, renewable packaging materials that will be the first in the market to have bio-based low-density polyethylene films and bio-based high density polyethylene caps, both derived from sugarcane. The product is manufactured solely from a combination of plastics derived from plants and paperboard. It marks a world first, and signals an important milestone in the company's long-stated commitment to drive ever-stronger environmental performance across all parts of its portfolio. The low density polyethylene used to create the laminate film for the packaging materials and the neck of the opening, together with the high density polyethylene used for the cap, are all derived from sugar cane.

Our 56th AGM will be held on 22nd December 2015. With two major events – exhibition and AGM – back to back there has been tremendous pressure on my team. I hope both the major events will pass away smoothly. In the exhibition we are stressing on giving our exhibitors and visitors value for their money and in our AGM I am confident that we will have a wonderful team to run the Federation.

With best wishes.



President

DESK OF HONY. SECRETARY

From the Desk of Hony. Secretary



Dear Members.

The hour of our much awaited and talked about Indplas' 15 – 7th International Exhibition on Plastics scheduled to be held at Science City, Kolkata from November 27 - 30, 2015 has finally arrived. This will be the largest exhibition organised by IPF with the largest number of exhibitors from abroad. Over 5500 sq. m. space has been booked with around 50 Foreign Exhibitors and 36 exhibitors from China itself. A Chinese delegation of 40 people will also attend our show. Every effort has been made to give maximum satisfaction to exhibitors and visitors. In the next issue of this magazine I will be able to give you the exact details of this exhibition and the feedback we have received from exhibitors and visitors. I thank all members and members of my team for the help extended by them for organising such a large exhibition.

The Federation will be holding its 56th Annual General Meeting on 22nd December 2015. Formalities for holding the AGM have already started and circular in this connection may have been received by you. I request all members who are desirous of serving the Federation to come forward and offer their candidature for serving the Federation.

Since two important events are being held with a short break in-between, all members of the Federation and Secretariat have been working extremely hard for the last one month. With all this effort I am sure you will be with IPF for organising an even better and bigger Indplas' 18.

With best wishes

Ashok Jajodia Hony. Secretary

INDIA KEEPS TARIFFS ON **CHINESE-MADE INJECTION MOULDING MACHINES**

India plans to continue its antidumping duties against Chinesemade injection moulding machines for five more years, with the government saying that without the extra tariffs against Chinese equipment, conditions will "deteriorate" for its domestic machinery industry.

Opponents of the tariffs argued that continuing the steep penalties on Chinese imports – up to 174% in some cases – could hurt the global competitiveness of India's plastics moulding companies by raising their prices for equipment.

India first imposed the steep duties in 2009, when government statistics showed that China was exporting more than 900 moulding machines a year to the country, out of a total demand of 3,000 to 4,000 machines.

After the 2009 tariffs, Chinese imports dropped to negligible levels, less than 50 a year. But India's Ministry of Commerce & Industry said the penalties needed to stay in place or the country's domestic machinery industry risks being again flooded and facing more harm.

"At the current production and price levels the domestic industry is already facing [a] significant decline in its financial result," the ministry said.

"The dumping is likely to continue and the performance of the domestic industry is likely to deteriorate, should the present anti-dumping [be] revoked."

India also is conducting a similar investigation dumping against Taiwan, Vietnam, Malaysia and the Philippines, looking at whether moulding machines from those countries are also being dumped in India.

The ministry noted that investigation, and the general economic conditions India's manufacturing industry in the last few years, as reasons for maintaining tariffs against Chinese companies.

But others, including the Chinese industry and Austria's Engel, had urged India to exempt their equipment or completely drop the tariffs, which cover machines of between 40 and 1.000 tonnes clamping force and specifically exclude all-electric machines.

Engel, which has two factories in China and is one of the world's largest machine makers, would like to export its machines from China, but said the tariffs make it very difficult for Indian customers to afford its more expensive, highertech equipment.

It suggested that maintaining the tariffs would work against the ultimate goal of the Indian government's "Make in India" plan

to modernise manufacturing.

"Under the government of India 'Make in India' campaign and the entry of top line global producers to India, there will be demands for high-performance machines also in the below 1,000 [tonne] sizes," Engel said, according to arguments summarised by the Indian ministry earlier this month.

"Engel machines feature precision, high performance and technology orientation," Engel said, according to a summary provided by the Ministry of Commerce Industry. "Customers who require this value addition are prepared to pay the premium but again to pay on top anti-dumping duty is very difficult for the customers."

Specifically, Engel was arguing that its two-platen machine designs are unique and should be exempt from the duties. But the Indian government rejected that argument.

domestic machinery industry accused the China Plastics Machinery Industry Association of making "false and misleading statements" and the Indian government noted that "none of the producers/exporters from China have cooperated" by providing information in requested the formats

Some Chinese machinery executives, however, have argued that any advantages they have come from China having a much larger industry that gains from economies of scale.

Information in the Indian government decision showed that India's injection machine market is about 3,000 to 3,500 machines a year, while the Chinese market is 30,000 machines a year or larger.

There are four Indian press makers that brought the petition to extend the tariffs: Toshiba Machine. Ferromatik Milacron India. Windsor Machines and Electronica Plastic Machines.

At least one other plastics trade group in India, the All India Plastics Manufacturers Association, had in the past urged the government to drop the tariffs on injection presses, saying that "Indian [small and medium-sized enterprises] should have access to economically priced technology".

Source: Plastics & Rubber Weekly

NEW **ROPP** FILM **ENABLES** IN IML THERMOFORMING

German film producer Treofan has developed a new film for in-mould labelling in thermoforming that delivers a look and feel on par with injection-moulded products.

The product features an innovative surface that enables stable fusing of thermoforming and label film at comparatively low temperatures and pressures, allowing the benefits of thermoforming to be harnessed without compromising quality.

Thermoforming is an increasingly popular alternative to injection moulding for certain product

groups, not least due to potential economies of scale. Until now, however, attaching BOPP labels to thermoformed products has required a separate process step; as temperatures and pressures used in thermoforming are much lower than those in injection moulding, direct fusion is not possible.

So Treofan has developed a special surface that attaches perfectly to thermoforming films under the conditions typically used for thermoforming. The resulting ioin between container and label is visually and functionally nearindistinguishable from the complete fusion achieved by injection moulding.

Following a comprehensive series of tests -- including with Illig, a leading provider of machinery and tools for thermoforming and packaging technology -- the new label film is now being rolled out on the market on a large scale under the name Treofan EPT.

Source: Plastics & Rubber Weekly

JAIN SEES **DRIP IRRIGATION** AS SOCIAL CAPITALISM

India's Jain Irrigation Systems Ltd. has grown to a \$970 million global company focusing on some of the smallest plastic products — tubing and components used in microirrigation systems to help farmers save water and boost crop yields.

Given concerns about water and food scarcity, and with the world's population expected to top 9 billion by 2050, the company believes its business case is strong.

But Jain executives also say they want to fulfill a larger social mission while making money. The company attracts attention from social capitalists — in August it ranked No. 7 on Fortune magazine's inaugural list of 51 "Change the World" companies.

The magazine said it wanted to recognize companies that have "made a sizable impact on major global social or environmental problems part of competitive strategy." Others in the top 10 include household names like Google, Toyota and Facebook.

In an interview at their headquarters on the outskirts of Jalgaon, in Maharashtra state. Jain executives offered a look at innovations under development and their plans to continue their global expansion.

Their markets are growing: In the Asia-Pacific region, drip irrigation is projected to grow 13 percent a year between 2015 and 2020, above the 11 percent annual growth projected globally, according to one recent study.

JISL believes its biggest drivers in India are the current low market penetration for the technology, and the development of drip equipment for more types of crops.

"We have merely reached to 5 million farmers in India, which is 5 percent of the 100 million farmers [in the country]," said Bhavarlal

founder Jain, and chairman. "Currently, we have covered only the horticulture crops through irrigation system. When we cover cash crops like rice and wheat, sky is a limit."

To that end, JISL has developed a drip irrigation system for those cash crops, he said, to try to convince farmers to move away from the "age old flooding method of irrigation."

"The validation of the system is going on," Jain said. "Once approved by the authorities we will start pushing it in the marketplace."

Beyond reducing water use, JISL argues that micro irrigation systems can also boost crop yields between 50 percent and 300 percent, depending on the plant, and raise farmers' incomes. Micro irrigation delivers small amounts of water to precise locations.

Beyond India

JISL has been active beyond India's borders. It has factories on five continents, and has been expanding in Africa.

"Now we are moving towards the western part of Africa with a focus on improving the income of small and marginal farmers in the countries of Nigeria, Kenya and Rwanda, to bring social change by making farmers self-reliant," said Managing Director Anil Jain.

Part of JISL's strategy is to work closely with farmers with small land holdings, educating them on crop techniques and developing customized irrigation solutions.

company currently sells into Africa from India and from a wholly-owned subsidiary it acquired Israel, NaanDan in Irrigation Systems C.S. Ltd., in 2007. It's studying building its first factory in the continent.

"Our next expansion would either be a greenfield facility or M&A in Africa in the next couple of years," Jain said.

JISL currently has 29 factories worldwide, including 14 in India and 15 overseas, with five of those in North America, two in South America, four in Europe, three in Asia outside of India and one in Australia.

The company also expanded its capacity for drip irrigation in Brazil by 20 percent six months ago, with a new factory in Leme, about 130 miles from São Paolo.

And earlier this year, it acquired the assets of PureSense Environmental Inc.. Fresno. Calif.-based irrigation technology firm that makes soil sensors and software to help farmers fine tune water use and better manage crop yields.

Irrigation is only part of its business. It's India's largest manufacturer of PE pipes, and has businesses in PVC pipes, plastic sheet manufacturing, biotechnology and solar power.

It's also ventured into food processing — it's currently the world's largest maker of mango pulp, puree and concentrate in

the world, and the third-largest processor of dehydrated onions.

But its roots are in micro irrigation, which remains its single largest business unit. It's India's largest maker of drip irrigation equipment, and the world's second-biggest.

Adjusting to business reality

The sector has had its challenges, though. It's difficult for farmers in India to obtain credit, so JISL said it's active in build rural financial institutions, adjusting its business model to those realities.

A 2014 University of Virginia study looking at Jain said government policies in India make farmers reluctant to invest in drip irrigation.

That's because water rights are poorly defined, subsidized energy makes pumping cheaper and the government can take up to a year to pay back the subsidies it provides farmers to buy drip equipment, which strained JISL's finances, according to the study from the university's Darden School of Business.

Still, Anil Jain said there is "huge potential" to continue growth that's averaged 10.5 percent a year for the last half-decade.

Executives said they will also continue to pursue social goals: JISL is developing a training center for plumbers in India, and in July it gave \$500,000 to the University of Nebraska to support research on water and food security issues.

"Mere economic growth of the

group is not our objective but to bring benefits to hundreds and thousands of poor farmers of this country through continued technological intervention in agriculture," Jain said.

Source: Plastics News

SOCAR POLYMER STARTS ON HDPE PLANT

Socar Polymer, a subsidiary of the Azerbaijan state oil and gas corporation Socarands everal private industrial companies, recently held a ground breaking ceremony for its 120,000 tonnes/year capacity high density polyethylene (HDPE) plant in the Sumgayit Chemical Industry Park. Along with a 180,000 tonnes/year polypropylene production facility, the plant is now due to be commissioned by 2018. The company already produces low density polyethylene most of which is exported.

Azerbaijan President Ilham Aliyev was present at a ground breaking ceremony.

The HDPE plant, aimed at import substitution to meet demand in Azerbaijan's growing plastics market, is set to produce a range of products including commodity grades manufactured with Ziegler and chrome catalysts and speciality grades like bimodal PE 100 pipe polymers.

It has already concluded a licensing

agreement with Ineos Technologies to use its Innovene S Process technology at the new PE facility.

In April, Socar signed an engineering contract with Italian firm Maire Tecnimont SpA for the construction of the PP plant, which is expected to be completed first by the end of 2017, according to the agreement.

The PP unit, transferred from Canada, will be equipped with LyondellBasell's Spheripol process technology. It is the first PP plant to operate in Azerbaijan as the country develops and extends its petrochemicals industry.

The Sumgayit Chemical Industry Park, 30 km north of the Azerbaijan capital Baku, which began to take shape in 2013 is expected to become a major new petrochemicals hub in Central Asia.

Socar group offshoot Azerkimya plans a longer term project to establish a bigger EUR13 billion oil, gas and petrochemicals complex near Baku with butadiene, PE and PP production. This is expected to include 670,000 tonnes per year of PE and 550,000 tonnes per year of PP, and is set to be launched in 2020.

Socar has a 51% stake in Socar Polymer, and the rest belong to the largest private holdings of Azerbaijan - Pasha Holding, Gilan Holding and Azersun Holding.

Source: Plastics & Rubber Weekly

PLASTIC PACKAGING MARKET GROWTH LOOKS POSITIVE

Boosted by demand from the healthcare and food sectors the world's plastic packaging market is expected to be worth \$370.3bn (£239.5bn) in five years' time, according to new research.

A new report from Transparency Research suggests the value of the market for plastic packaging will grow by a compound annual growth rate of 5.2% between now and 2020.

Unsurprisingly food and beverage uses accounted for more than two thirds (65%) of end-use in 2013, the last year for which data is available.

While this trend is expected to grow in the coming years, medical applications are likely rank as the fastest-growing, given the growth of the healthcare market.

Asia-Pacific is expected to be the fastest-growing region in terms of market share, as changing lifestyles and the growing size of aspirational populations drives demand.

However developed markets such as North America and Europe are also likely to see above-average growth rates, boosted by medical and food and beverage sectors, among others.

Source: Plastics & Rubber Weekly

INCREASE RECYCLATE IN PLASTIC PRODUCTS. SAY EREMA CEOS

The entire plastics supply chain should set a goal of producing high-quality products with a high recycling content, say Klaus Feichtinger and Manfred Hackl, joint CEOs at Erema, in this Q&A with Plastics News Europe.

Q: Erema Group posted record turnover of €130m in 2014/15. Where is the group's growth coming from?

Klaus Feichtinger: This growth is primarily due to our new plant generation Intarema. The sales figures - over 250 in the past 18 months - confirm that this innovation is an attractive technology for customers. The stability of the system is above average - it is unparalleled in the market. Plus, with Vacurema we are the market leader in the USA, and in Europe our market share is in the region of 30%.

Together with its sister companies 3S, Pure Loop and our subsidiary Erema North America, Erema has been pursuing a consistent and sustainable growth strategy for many years. Pure Loop GesmbH pursues the further development of the shredder-extruder technology and, as a new sister company, helps us to continue with our expansion strategy and clear market positioning. As a result we have considerably intensified the range of services we offer in the field of In-house Recycling.

Speaking of growth, I should also mention the expansion of Erema North America's trial centre. Due to the high demand in the USA especially in the post-consumer recycling sector - we have significantly expanded the trial centre at the company's head office in Ipswich, Massachusetts, with four permanent recycling systems available for our customer's trial runs. This will go into operation in late summer. We are on a course of expansion with 3S. The production area at the new location in Wartberg im Mürztal in Styria has been increased by 4,000 square metres to 7,000 square metres in total.

Q: What needs to change in Europe for plastics recycling to achieve its full potential?

Manfred Hackl: May I elaborate a little on this? Even greater importance is going to be attached to plastics. The benefits of this multifunctional material in terms of technology and design will drive forward innovations in many product sectors. You can see this in lightweight automotive construction, for example, reduce fuel consumption and CO2 emissions. Plastic consumption is currently growing at a rate of 8% every year worldwide, with around 7.2 billion people living on the planet earth. The global population is expected to be in the region of 8.4 billion in the year 2030 and this will impact on the demand for plastics.

population, The growth in however, will not be distributed evenly across all continents. While Europe's contribution to the global population will shrink from 18% to 8%, other regions of the planet will grow rapidly and disproportionately - and with them also the demand for raw materials. As, however, Europe has relatively low fossil energy resources, the shortage in these areas will exacerbate and lead to an increase in prices.

This means that in future we will have to drastically reduce our dependence on fossil raw materials such as crude oil or natural gas and we will have to do so in two ways. First we will have to succeed in closing the loop of existing plastic streams by means of recycling. And secondly, because transport, heating and energy still currently account for 87% of crude oil consumption. we have to make more intensive use of the material benefits of plastics to obtain renewable energy and for lightweight engineering.

Enormous potential is developing for plastics recycling, because plastics are becoming increasingly valuable as a secondary raw material. But to turn waste plastic into high-quality and accepted secondary raw material calls for intensive communication within the entire plastics industry - between raw material suppliers, plastics processors and recyclers. This is the basis for successful ecodesign. Only then is it possible to develop new products which take into

account their later recyclability at the time they are produced.

The way forward is quite clear to me: organising material flows better and optimising the production of plastics in such a way that new, high-quality products with a high recycling content can be made from them. This is how sustainability works in a closed loop.

Passing laws and directives for the collection of plastic waste for reuse is not enough; you have to stipulate defined minimum percentages of recyclates in plastic products. A higher portion of recycled material in plastic products would not only have enormous positive leverage on the entire industry, it would also be a huge improvement in terms of image. But the longer this development takes, the more difficult it will be to maintain our material flows in a sustainable way.

Klaus Feichtinger: For the whole thing to work there is one critical factor: plastics recycling has to be clear to the plastics processors and the quality of the raw materials supplied has to be consistent, meaning raw materials or recycled pellets with precisely specified properties for the respective end application required. Another important point is reliable availability. Or to sum it up, the very same reliability which plastics processors are used to from virgin material.

Pressing ahead with this development requires even more global manufacturers branded products to recognise the opportunity of initiating a positive spiral and offering products which contain recycled materials. Ikea was one of the first companies to recognise this, Coca-Cola also makes a major contribution with rPET featuring in bottles and Henkel was recently added to the list with another product containing recycled material. Far more global players, however, would have to pull together.

Source: Plastics in Europe

VINYLPLUS: RECYCLING PVC CREATED 1,000 JOBS

The 481,000 metric tons of PVC recycled across Europe in 2014 contributed to around 1,000 jobs in recycling plants, according VinylPlus, the sustainable development program of the European PVC industry.

As well as creating employment opportunities, PVC recycling is also saving around one million metric tons of carbon emissions annually.

The figures are calculated on an average of one employee needed to recycle 500 tonnes of PVC per year and a 2 kilogram saving of CO2 for each kilogram of PVC that is recycled. Energy demand for recycling PVC is typically around

90 percent lower than virgin PVC production.

Waste PVC materials, such as rigid PVC films, pipes and fittings, window profiles and related products, as well as flexible PVC (for cables, membranes and flooring) were recycled through the European-wide network of 155 Recovinyl-accredited recyclers.

A total of 11.8 million window frames are recycled per year.

Speaking at the recent Brussels Sustainable Development Summit, Arjen Sevenster, technical and environmental affairs manager for the European Council of Vinyl Manufacturers, highlighted how voluntary commitments, such as VinylPlus, which put together the entire European PVC value chain, can address sustainability challenges in a systemic and holistic way, helping to move an industry sector towards a lowcarbon circular economy.

He said: "We are addressing sustainability as a whole through a range of actions including waste management, sustainable use of additives and reducing energy consumption.

"For example, from 2007 to 2013 there was a 10.2 percent decrease in energy consumption to produce one tonne of PVC. Resin producers are targeting a 20 percent reduction of energy consumption by 2020."

Source: Plastics in Europe

Contd.... pg.17

DEEPAWALI GET TOGETHER OF IPF

Deepawali Get-together of IPF members was held on 31st October, 2015 at Penetti Banquets, Mani Square Mall, 5th Floor, Kolkata. The entertainment programme consisted of "Evergreen Bollywood Melodies" & Dances. It commenced at 6.30 pm and last for about three hours. The programme was accompanied with mouth watering chats. This was followed with a sumptuous dinner with cocktails. The programme was very well organised with a large gathering. This programme was sponsored by the IPF Office Bearers and a few other members. During the programme Shri K. K. Seksaria, Past-President of IPF, was felicitated by members for being elected as President, Plastindia Foundation, Mumbai for the term 2015-18. We thank all members who made it convenient to attend the programme.















VISITOR PROMOTION OF Indplas 1.5 MINISTRATIONAL SECTION AND ALL PROMOTION OF INDICENSAL PROMOTION OF I



JAMSHEDPUR







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PRESS CLIPPINGS

पनी के प्रोजेक्ट डावरेक्टर धीरज पांडे ने सिक किस्त की भी सुविधा है। (का.सं)

कोलकाता में लगेगी अंतरराष्ट्रीय प्लास्टिक प्रदर्शनी

बन्दा । इंडियन एशारियक फेडरेलन कोलकाता में विश्वास एग्नीवियन स्थाने जा रही है। पद बन्दानी 27 वंबयर से मुरू होगी, जो बार दिनों क पानेशी यह अंतरराष्ट्रीय एसारिटक प्रदर्शनी हम कई से सावनी प्रदर्शनी है। गांचां एसारिटक प्रदेश से जुड़े समी तरह के उत्पाद एसे सेवा अपन करने वाली कंपनियां अपने उत्पाद एसे बंदा का प्रदर्शन करेगी।

प्लास्टिक उपयोग में सबसे बडा देश होग

सिटी रिपोर्टर पटना

भगले साल तक भारत प्लास्टिक जजोरिया ने बता पयोग में विश्व में तीसरा स्थान का आयोजन को बिद्याय 15 पुपर्विभी निष्प्रित 27 ाप्त कर लेगा। इंडियन प्लास्टिक संयोजक रोहित अधिव लव 279 30 व डरेशन द्वारा बीआईए सभागार में 2012-13 में प्लाब्दाबा वर्ण व्यवस्था आयोजित प्रेस कॉन्फ्रेंस में 11.8 मिलियन मीट्रिक्व वर्वा 15 यहरू बातें अध्यक्ष प्रदीप नैय्यर ने तक 16.5 और 2022 हीं। उन्होंने कहा कि 2012 के मीट्रिक टन हो जारे कड़ों के हिसाब से भारत में

अतरिष्ट्रीय प्लास्टिक प्रदर्शनी २७ से ३० नवम्बर तव

कोलकाता में होगा इंडप्लॉस-15 का आयोजन : फेडरेम्स से के

ଇଣ୍ଡପ୍ଲାଷ୍ଟ୍ ପ୍ରଦର୍ଶନ ଲବ୍ୟ ବୋଲି ଏଠାରେ ପର୍ଜିଲନାରେ ସମ୍ୟବଳ ଅଶ୍ରେଳ

Indplas' iPf Inc Plastics Fed

କାର୍ଯ୍ୟକାରା ପଦସ୍ୟ ଆଶିଷ ଅନ୍ତସ୍ଥାଲ

27 नवबर र

ଓଡ଼ିଶାରୁ ଭାଗ ନେବେ ୧୨ ଉଦ୍ୟୋଗୀ, ହଳାରେ ପରିଦର୍ଶକ

Seration

तेजी से उभर रहा : नैय्यर

पुरे विश्व में प्लास्टिक उद्योग

न्यूज ब्रीफ

400 स्टॉल पर होगा प्लास्टिक उत्पाद

जमशेदपुर इंडियन प्लास्टिक फेडरेशन द्वारा कोलकाता के साइंस सिटी प्रांगण में 27 नवंबर से 30 नवंबर

तक अंतरराष्ट्रीय प्लास्टिक प्रदर्शनी का आयोजन

किया जाएगा। इसमें देश-विदेश के लगभग 400 स्टॉल लगाए जाएंगे। यह जानकारी आयोजक कमेटी

के चेयरमैन अशोक जाजोड़िया ने मंगलवार को बिष्टपर

स्थित एक होटल में संवाददाता सम्मेलन में दी। उन्होंने

कहा कि प्रदर्शनी इस्टर्न इंडिया के लिए मील का पत्थर

साबित होगा। इसमें नई टेक्नॉलॉजी की प्रदर्शनी के साथ जानकारी भी दी जाएगी। फेडरेशन के झारखंड

का प्रदर्शन : अशोक जाजोड़िया

ଳଶ୍ୱର, ୨ ୯ ୧ ୦ (ବ୍ୟୁରୋ): ଭାରତୀୟ କ୍ଲ ମହାସଂଘ (ଆଇପିଏଫ) ପକ୍ଷରୁ ାୟର ୨୭ରୁ କୋଲ୍କାତା ସାଇନ୍ସ ସିଟି ଆରେ ଆୟୋଜନ ହେବ ଆନ୍ତର୍ଜାତିକ ଜ ପ୍ରଦର୍ଶନା 'ଇଣପୁଷ୍-୨୦୧୫' । ୪

ଧରି ଚାଲିବାକୁ ଥିବା ଏହି ପ୍ଲାଷିକ୍

ାନାରେ ଦେଶ ତଥା ବିଦେଶରୁ ମୋଟ୍

Indian Plastic

ଉତ୍ପାଦ ଓ ମେସିନରୀ ଜ୍ଞାନକୌଶଳର ପ୍ରଦର୍ଶନ କରିବେ । ଏହା ଓଡ଼ିଶା ସମେତ ପୂର୍ବ ଭାରତର ପାଞ୍ଚିକ୍ ଉଦ୍ୟୋଗୀଙ୍କୁ ନିଜ ବ୍ୟବସାୟ ଆଧୁନିକାକରଣ ଓ ସମ୍ପସାରଣରେ ବେଶ୍ ସହାୟକ ହେବ ।

ଏ ସମ୍ପର୍କରେ ସୂଚନା ଦେଇ ଇଷପ୍ଲାଷ୍-୨୦୧୫ର ଅଧ୍ୟକ୍ଷ ଅଶୋକ ଜାଜୋଡିଆ क्रब्युब्र्ह्म अंतरराष्ट्राय प्लास्टिक प्रदर्शनी 'इडप्लस क्रिशिक्ता व्यक्तमशेदपुर : इंडियन प्लास्टिक फेडरेशन की थर्धिक हिलाक व्यापसानित : इंडियन प्लास्टिक फेडरशन की इन्हें कर्ष पुरु और से 27 से 30 नवंबर तक प्लास्टिक प्रदर्शनी बात किर्व । इंडप्लस-15' का आयोजन किया जाएगा। क्रमाल बढ़ कोलकाता स्थित साइंस सिटी मैदान में 98,000 प्लास्टिक की विशेष उपयोगिता व इसकी बढ़ती eal यांग जरूरतों पर केंद्रित इस प्रदर्शनी में प्लास्टिक के 9 श्रुवाब- 9 विविध उत्पादों व फायदों को प्रदर्शित किया **७६०**पाठा 'बाबाएगा। मंगलवार को बिष्टुपुर स्थित एक होटल १,०००० ए आयोजित संवाददाता सम्मेलन में इंडियन बबिब ब्याशास्टिक फेडरेशन के आयोजकों ने इस बाबत **ब्रिक्टि । ब्रा**ट्जानकारी दी । प्रदर्शनी की आयोजन समिति के **७**बेद्माब्ब क्र_{मियर}मेन अशोक जजोड़िया व संयोजक प्रकाश



प्रदर्शनी की जानकारी देते आयोजक। जब भारत में आयोजित होने वाली किसी प्रदर्श से सीख लेने के लिए विश्व के करीब 12 दे के कई प्रतिनिधि भारत आएंगे। इनमें चीन सम ताइवान, सिंगापुर, यूएई समेत अन्य देशों

औद्योगिक संगठन खासी दिलचरपी ले रहे है

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CHINESE PLASTICS **ASSOCIATIONS JOIN** EFFORT TO REDUCE MARINE DEBRIS

Now part of the Global Declaration for Solutions on Marine Litter, the associations join 60 other organizations to help find solutions to keep plastics out of the ocean.

Three associations representing China's plastics industry have become the latest signatories to the industry's Global Declaration for Solutions on Marine Litter, a commitment to help find and implement solutions for keeping plastics out of the ocean.

The China Petroleum and Chemical Industry Federation (CPCIF), the China Synthetic Resin Marketing Association, and the China Plastics Processing Industry Association (CPPIA) have officially signed on to the global declaration under which plastic industry leaders commit to contribute to scientific research, knowledge sharing, and partnerships to develop post-use solutions that treat plastics as resources and keep them out of the marine environment.

"Plastics are essential to achieving a sustainable society, because they reduce waste, energy use, and greenhouse gas emissions, all while improving the quality of modern life," says CPCIF Chairman Li Shousheng. "We must continue working together to find post-use solutions that take advantage of these valuable materials so they don't become litter or create 'white pollution."

"We welcome and commend China's plastics industry joining global efforts to address marine debris," says Steve Russell, Vice President of Plastics for the American Chemistry Council. "Marine debris is a complex, global problem, and China's participation is a strong signal that this industry is committed to doing our part in providing solutions."

To date more than 60 associations in 34 countries have signed the plastics declaration, industry's global through which 185 projects have been planned, initiated, or completed since its launch in March 2011. These associations report on their progress annually.

Earlier this year, CPPIA became a partner in the plastics industry's Operation Clean Sweep® program, an effort designed to help companies that handle plastics raw materials properly contain these resources and prevent them from entering the marine environment.

Source: Plastics News Daily

A NATURAL FIBRE REINFORCED **ACRYLONITRILE-BUTADIENE-STYRENE COMPOSITE** MATERIAL

Elix Polymers introduces Elix ECO ABS-NF thermoplastic for injection moulding applications and specific extrusion processes, delivering a high aesthetical value to the final ABS-NF moulded parts.

applications Market include automotive and furniture markets.

The product can be processed without having to modify machines and offers a number of key benefits. These include high stiffness, heat resistance, low moulding shrinkage ratios, low emissions and weight reduction when compared to glass reinforced Acrylonitrilefibre Butadiene-Styrene (ABS). For example, Elix ECO ABS-NF has a density of 1.12 compared to 1.15 for ABS-GF. The material has been also tested for 3D printing technology with impressive results, both in terms of processability and aesthetics.

The development of natural fibre reinforced ABS was undertaken under the auspices of the EEA and Norway Grants. This was the first time that a European ABS producer was given a European Grant for a project to investigate new sustainable ABS materials and composites.

The EEA Grants and Norway Grants represent the contribution of Iceland, Liechtenstein and Norway to reducing economic and social disparities and to strengthening bilateral relations with 16 EU countries in Central and Southern Europe and the Baltics.

Introducing the new generation ABS polymer composite, David

Castañeda, Operations Director, "We believe that this said: new material offers a range of sustainability benefits that meet current industry trends. At the same time, it underlines Elix Polymers' commitment to the establishment of a more environmentally sustainable product portfolio and establishes our company's position as a leading supplier of eco-friendly ABS materials."

David Castañeda added: introduction of this new generation material fully fits our kev objective: to expand the company's portfolio of materials for ecofriendly manufacturing, greater sustainability and health impact awareness."

Source: Plastics News Daily

DISPOSABLE VACCINE INHALER WINS SWEDISH INNOVATION AWARD

An inhaler designed to deliver vaccines has earned Swedish company Iconovo (Lund) the 2015 Innovation Prize, awarded by global business consultancy PwC and the Lund University Innovation System. The award is designed to recognize and stimulate innovation in southern Sweden; the winning company receives SEK 150,000 (\$16,900) in prize money.

Inhalers are a staple of asthma sufferers, but with the right technical design, they also can be used to deliver other types of medications,

says Iconovo. It developed the **ICO**one unit-dose disposable inhaler as a low-cost device to deliver dry powder vaccines, among other applications. The product is equally suited for high-volume, automated manufacturing as well as low-volume, manual assembly.

Vaccines are currently administered injections. which discomfort and can contribute to infections if the drug and device are mishandled. Moreover, injectable vaccines must be refrigerated, which is costly and can lead to waste. Needlesticks are also a concern. By contrast, inhaled dry powder has a shelf life of several months at room temperature, and the inhaler is completely harmless during and after use.

In addition to vaccines, the ICOone inhaler can be used in phase 1 clinical trials, to deliver expensive drugs in individual doses and as an economical replacement or supplement for traditional multidose devices, according to Iconovo. The disposable device is made of a single plastic part with an aluminum foil liner.

Iconovo operates within the Lund Life Science Incubator (Lund LSI), a community experts, business advisors and companies incubator whose mission is to help entrepreneurs and startup companies develop and commercialize new ideas. It provides business development, financing, recruitment and risk management assistance, and

maintains an infrastructure of office space and laboratories equipped with advanced instrumentation.

"We are extremely proud and pleased about the level of innovation that the companies in the incubator demonstrate," says Ebba Fahraeus, CEO of Lund LSI. "Our unique ecosystems and especially our collaboration with Lund University researchers create a large inflow of unique ideas that may lead to future global companies," adds Fahraeus.

Source: Plastics Today

WEEKLY RESIN **UPDATE: PE** PRICE INCREASE POSTPONED, AGAIN

The commodity resin markets continued to transact at a fervent pace the week of November 2, reports the PlasticsExchange in its weekly update, noting that the heightened activity is somewhat uncharacteristic for the first week of a month. A high volume of material changed hands, with polyethylene (PE) moving more than polypropylene (PP), and while there were mixed signals, prices averaged out about steady. As the calendar turned to November. producers were again very quick to postpone the \$0.05/lb PE price increase. which was initially nominated for October. Now, they are looking at a December timeline. PP producers are looking to add to their successful campaign of margin expansion, seeking another moderate increase for November.

Spot ethylene trading picked up:

The market was more active than the previous week, and prices fell. Ethylene for November delivery dropped steadily during most of the week, changing hands as low as \$0.225/lb, before recovering to most recently transact at \$0.235/ lb, a net one-cent loss, writes the PlasticsExchange.

The PE market was both busy and interesting, according analysts, more so than the overall flat price results might indicate. Although spot offerings were markedly lighter, a fair number of spot transactions were concluded. Several production issues had traders seeking material to cover commitments. while logistics delays brought some processors to the marketplace for urgent supply. Surplus inventories around the country, and Houston in particular, have thinned out; some film grades are becoming outright difficult to source. This has lifted spot prices for a number of PE materials, but producers also postponed their \$0.05/lb price increase from November to December, providing an offset to balance the market price.

Although spot propylene traded several times, there was very little price movement.

Spot PP trading was about average and prices were mixed, evening out about flat, according to the PlasticsExchange. The availability of off-grade resin and prime imports enhanced spot liquidity. On the other hand, continued resin production challenges have kept domestic prime material snugly supplied, providing producers with

power to maintain general upward pressure on the market. While earlier in the year, contract prices were at a rare and wide discount to spot, the spread has consistently shrunk and spot is again becoming competitive. November PP contracts will see an increase: PGP monomer should rise a penny or so and, in addition, another resin margin gain is likely. While it's still early in the month, it appears that a total of \$0.02 to 0.03/lb could be implemented for November PP contracts.

Source: Plastics Today

NEW SILICONE ELASTOMER UP TO 50% STRONGER THAN EXISTING **MATERIALS**

Calling it an important milestone in silicone science that will open new avenues of innovation for medical device designers, Nusil (Carpinteria, CA) has introduced a material with a tensile strength up to 50% greater than existing silicone elastomers on the market. The line of High Strength Silicones also features a combination of properties that make the materials uniquely soft and pliable, according to the company.

The new platinum-cure silicone elastomers provide device and component manufacturers with a super strong, low durometer, high elongation material without compromising hysteresis or tensile set, says NuSil. In particular, the company believes the materials will

enable the production of thinner, stronger and more resilient catheter balloons.

The High Strength Silicones also bridge the gap in strength that has historically prevented manufacturers from upgrading to silicone from latex in high-use devices such as mechanical pumps. NuSil says that this new technology platform provides manufacturers with a super strong tubing alternative that has all of the advantages of silicone—durability, translucency biocompatibility—without and the risk of causing latex-related allergies.

"I believe that NuSil's High Strength Silicone platform is one of the more important innovations in silicone science in the past few decades," said Jim Lambert, PhD, NuSil's Director of Research and Development for Life Sciences, in a prepared statement. "I'm truly proud of our development team for pushing the boundaries of what seemed chemically and physically possible, and for delivering products that will enable our customers to innovate beyond the conventional performance limitations of silicone elastomers."

NuSil will showcase the High Strength Silicones at Compamed in Düsseldorf, Germany, next week. Co-located with Medica, the largest medical technology trade show in the world, Companed runs from Nov. 16 to 19 at Messe Düsseldorf.

Source: Plastics Today

PVC INDUSTRY MAKING IMPRESSIVE STRIDES WITH A BIG **SUSTAINABILITY PROGRAMME**

The grand old staple of plastics materials, PVC, is reaching a landmark year in 2016: 80 years of service in water pipes in Germany. Rigid PVC in construction is the largest market for vinyl resin, primarily pipes and profiles. This polymer has provided excellent properties for waterproofing, water distribution pipes, food packaging, agriculturalfilms, cables, bloodbags, window profiles and many other critical applications. Correct resin selection and formulation provide durable, tailored properties for each type of use. However, over time the formulations have changed driven by chemical industry regulations and the constant push to improve performance and economics. In terms of sustainability the vinyl industry is a leader in recovery and recycling through an excellent industry chain and voluntary codes of conduct. AMI is bringing together plastics processors, PVC producers, compounders, additive suppliers and researchers to discuss the future of vinyl materials at PVC Formulation 2016 at Cologne. The PVC Formulation 2016 conference kicks off on the morning of 6th April with an assertive overview of the market situation in Europe from Kem One, a leading player in the European industry. The PVC industry has made impressive strides with a big sustainability which programme, looks everything about the compounded material from the additives through to the end-recovery and re-use of polymer. At PVC Formulation 2016 Dr Ettore Nanni, CEO of Reagens will talk about the new sustainable additives initiative from the ECVM. This is followed by an AGPU paper on the hot topic of additives in the circular economy for PVC including the issue of legacy ingredients.

There are several PVC ingredients that are available in different forms such as natural and synthetic including magnesium hydroxide aluminium hydroxide; Egyplast – Elsewedy Electric has studied the different performance in PVC looking at properties such as processing, flammability and tensile strength. Dr Beyer of Kabelwerk Eupen has focused a lot of research on high performance flame retardancy, while Europiren has developed a new flame retardant filler and smoke suppressant. From France, Cray Valley has a new processing aid for rigid PVC, while in the US AM Stabilizers has developed high metal content, alkyl phenol free carboxylates for liquid mixed metal stabilisers.

Leading compounder Benvic Europe has a new generation of thermoplastic alloy for use in construction, this is an innovative PVC-U compound with improved thermal performance. Siding and profiles are exposed to constant sun irradiation and to thermal changes in the environment, which can cause warping in extreme cases. The IQAP Masterbatch Group has developed a new cold masterbatch system to give good colour and stability to profiles and siding. In another outdoor setting, the Netherlands testing group, KIWA, has studied the effects of sunlight on PVC gas pipes. Signage is a widespread application of vinyl and Avery Dennison has looked at the effects of weathering on

graphic films. Sustainable materials are making inroads in all areas of industry: Dr Michael Schiller will review developments in PVC-wood plastic composites.

The flexible PVC industry comprises a wide range of applications. The versatility of plasticised vinyl requires an array of different formulations and testing, depending on the end use, from extractables and leachables for food through to flame retardancy in building materials. Konrad Hornschuch is a key producer of artificial leather and has looked at the selection of formulation with potential conflict between appearance, haptics and functionality. Terumo Penpol in India is manufacturing a range of storage systems for blood and blood components made from plasticised PVC and uses alternative plasticisers to replace DEHP. From Germany BASF is keeping ahead of the regulatory and industry trends in plasticisers. In Hungary, Professor Marossy of Borsochem has studied the flow of plasticised PVC melts and the effects of the thermal and shear history.

The CEFIC industry association plasticisers group, ECPI. constantly reviewing the latest legislation and is examining the science behind the latest European regulations. There has been an epidemiological study at Maastricht University on how reviews of the effects of phthalates have been conducted. On the plasticiser producers' side, Grupa Azoty Zak is taking a view of the European plasticiser landscape and where it is heading. Out of Sweden, Perstorp has developed a high performance polyol ester plasticiser for plastisol.

Source: Plastics News

MANAGEMENT MANTRA

A Psychological Fortress

Dr. Devdutt Pattanaik

Durga is the goddess of kings, worshipped by both Ram and Ravana in the Ramayana. It is to her that the Navaratri celebrations are dedicated to. She is visualized riding a lion, holding many weapons in her hand and doing battle with a buffalo-demon. The word Durga is rooted in the word 'durg' which refers to a fortress that we build to protect ourselves from marauders. This fortress can be seen literally or metaphorically. Durga then is the psycho-

logical fortress we build to cope with the corporate world.

No matter what is said about the corporate world, it is voluntary submission to a system that repeatedly humiliates and controls us, denies us freedom, all posters of ownership and empowerment notwithstanding.

Consider the process: once we agree to join the company, we have to have sign a memorandum of agreement, then we have to be

inducted into the company through a series of training programs and meetings that tell us how we are expected to behave in the company if we wish to thrive. Then we have to submit to the processes of the organisation, everything from when we are supposed to arrive, and when we are supposed to leave, and how we are supposed to conduct yourself when inside. There are guidelines on how we are supposed to conduct meetings, conduct interviews, hire people, engage with them, appraise them, recognize them and even fire them. We really don't have a voice and have to submit to the processes deemed appropriate by people in more senior positions than you. Even leave is granted as a favour and is accompanied by the fear that we may be declared invalid during our absence.

This disempowerment is least in startups and increases

as organisations grow larger. Since modern management is rooted in monotheistic mythologies, we prefer central control and are aided to do so by technology. Thus we send templates and forms to organize how we think and how we present data. Makers of the template always feel more powerful than those who have to fill the template. But we are told this is for the larger good, of the organisation and the customer.

> And so employees seek escape. They seek ways to block out the disempowerment they have to endure constantly. The simplest method is to simply switch off that phone when one is with family, even if that means organisational censure. The more complex method is to switch off while the boss is talking and being indifferent to the various organisational rituals like town hall meetings, or organisational

initiatives like corporate social responsibility.

A good leader is sensitive to the disempowering ecosystem created by large technology-based corporations. He brings in the emotion that corporations are incapable of having. He has the power to bring joy to the team, discuss their issues, vent their frustrations – not because that is the 'expected leadership process' but simply because he is human. He can create a tiny oasis of freedom without stirring insecurity of the corporation and its process auditors. Little else is in his control and that is what middle level managers need to aspire to if they really wish to bring value to their colleagues: give Durga, not just instructions, enable teams to survive the fetters that are an inevitable part of corporate life, and not feel entirely domesticated, stripped of all free will.



INDPLAS'15 EXHIBITORS



	NAME OF THE EXHIBITOR	STALL NO	68	Mech Tech Industries	C-40
	HALL - 'A'		69	Meet Engineering	C-68
1	CIPET	A-2A	70	Multispan Control Instrument Pvt Ltd	C-60
2	EASTERN POLYCRAFT INDUSTRIES LTD	A-19	71	N.A. Roto Machines & Moulds India	C-49 & 50
3	FOGLA GROUP OF COMPANIES	A-5	72	Perfect Belts Ltd	C-8
4	GUJARAT STATE FERTILIZERS & CHEMICALS LTD	A-4	73	Pimco Machines Pvt Ltd	C-23
5	INDUSTRIAL DEVELOPMENT CORPORATION OF ODISHA	A-22	74	Pioneer Engineering Corporation	C-13
6	Indian Oil Corporation Ltd	A-12	75	R.M. Polypets Pvt Ltd	C-27
7	Lohia Corp Ltd	A-3	76	Rajhans Plastic Machinery Pvt Ltd	C-6
8	MALSONS POLYMERS PVT LTD	A-10	77	Roop Telsonic Ultrasonix Ltd	C-66
9	Oriplast Ltd	A-1	78	S.K. Enterprises	C-21
10	Plasti Pack	A-8	79	S.V. Enterprise	(-7
11	PRABHU POLY PIPES LIMITED	A-13,14,15 & 16	80	Sar Machines Pvt Ltd	C-15 & 16
12	Prayag Polytech Private Limited	A-17	81	Shree Radhekrishna Extrusions Pvt Ltd	C-18
13	RAUNAQ PLASTICS LTD	A-7	82	Sinoflex Printing Ink Industries	C-20
14	SERVO PLASTICS PVT LTD	A-2	83 84	Sree Gee Die & Mould Mfg Pvt Ltd Tempcon	C-39 C-5
15	SONALI POLYPLAST PVT LTD	A-9	85	Usbco Steels Pvt Ltd	C-46
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