

## PLASTICS INDIA

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

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Dear Friends,

There is global momentum for a fundamental shift in how we produce, use and reuse plastics. This material and its applications, like packaging, are an integral part of the global economy and deliver many benefits. The low cost of plastics packaging and lack of sufficient recycling on the other hand entail significant economic and environmental drawbacks. Manufacturers often wish recyclers had the technology and capacity to handle their latest plastic products. From the recyclers' perspective, simplifying packaging types and materials could make their job a whole lot easier. Policymakers can play an important role for these upstream and downstream developments to happen in parallel. One concrete example is Extended Producer Responsibility, or EPR, schemes. These systems allow policymakers to connect upstream packaging design with downstream recycling of plastics. EPR is a policy approach in which a producer's responsibility for a product covers the entire product life cycle, from design to the post-consumer phase. Implemented well, EPR schemes can have large impact whereas bans can deliver more immediate results for certain applications but come at a cost and loss of convenience to the consumer. Policymakers should use bans in extreme cases and instead encourage or drive by law initiatives on better recyclability to support the shift towards a plastics system that works. A research in Japan suggest that EPR schemes contributed to a 27% increase in recycling rates of containers and packaging waste over a 4 year period. Such a scheme doesn't happen by itself, and sophisticated policy that seeks to support industry whilst eliminating waste requires time and effort from the various parties at the table.

May it be a social or an economic discussion, around the world, at present, it cannot conclude without discussing the outbreak of Corona Virus which has now been declared a global emergency. The disease, which originated in China has now spread to 20 countries, including in India. By and large all the countries in the world has temporarily suspended visas for travellers to/ from China. Citizens have been asked to refrain from travel to China. It is believed that the outbreak of the virus is going to have larger impacts on the worlds economy as China being central to a diverse range of global supply chains: much of the world's raw materials travel to China before being turned into a manufactured product. Asian and Western stock markets endured a seesaw week last week, and oil and metal prices came under pressure too, amid anticipation of a slowdown in global demand.



Manish Singhania  
Co-Editor

# Presidential Address

Dear IPFIans,

The much awaited Union Budget was presented by our Hon'ble Finance Minister Ms. Nirmala Sitharaman on 1st February, 2020 at 11 A.M. in Lok Sabha. The Union Budget of India is also referred to as the Annual Financial Statement in the Article 112 of the Constitution of India. It is the annual budget of Republic of India as it's a statement of estimated receipts and expenditure of the Government for the coming year.

While presenting the budget, for the year 2020-21, the Hon'ble Finance Minister stated that this budget is woven around three themes- Aspirational India, Economic Development and Caring Society. While presenting her budget, she stated that this budget will boost the incomes of people and enhance their purchasing power and it aims to have the aspirations and hopes of various sections of society fulfilled.

The key highlights of Budget 2020-21 were as under-

- \* India is now 5th largest economy in world.\*
- \* 60 lakh new taxpayers and 105 crore e-way bills generated under GST.\*
- \* GST benefit of Rs.1 lakh crore extended to consumers.\*
- \* Central government debt reduced to 48.7% of GDP in 2019 from 52.2% in March, 2014.\*
- \* FDI in India rises to \$284 billion during 2014-19.\*
- \* FM proposes Rs 27,300 crore for the development and promotion - of industry and commerce in 2020-21.\*
- \* Rs. 1.7 lakh crore provided for transport infrastructure in 2020-21.\*
- \* A scheme proposed to provide high insurance cover for exporters.\*
- \* Rs. 22,000 Crore outlay for power, renewable energy sector in FY21.\*
- \* Corporate tax for existing companies slashed to 22%.\*
- \* 10% for income between Rs 5 lakh-7.5 lakh against 20%.\*
- \* 15% for income between Rs 7.5 lakh-10 lakh against 20%.\*
- \* 20% for income between Rs 10-12.5 lakh against 30%.\*
- \* 25% for income between Rs 12.5 -15 lakh against 30%.\*
- \* 30% for income above Rs 15 lakh.\*
- \* Dividend distribution tax abolished. Companies no longer required to pay DDT. A total of Rs 25,000 crore is revenue foregone due to DDT abolition.\*
- \* DDT shifted to individuals instead of companies.\*
- \* Currently more than 100 exemptions provided in I-T Act, out of which around 70 have been removed in the simplified regime. Remaining yet to be reviewed.\*
- \* Concessional tax rate of 15% extended to power generation companies.\*
- \* Government proposes 100% tax concession to sovereign wealth funds on investment in infra projects.\*
- \* To boost MSMSEs, turnover threshold for audit raised to Rs.5 crore from Rs.1 crore.\*
- \* For affordable housing: deduction of Rs. 1,50,000 will be extended to loan sanction by one year.\*
- \* Government proposes deferment of tax payment by employees on ESOPs from start-ups by 5 years.\*
- \* Tax on Co-operative societies to be reduced to 22% plus surcharge, as against current 30%.\*
- \* Investment limit of foreign portfolio investors (FPI) in corporate bonds increased from 9% to 15%.\*
- \* Govt to launch system for instant allotment of PAN on basis of Aadhaar.\*

In a challenging environment, most market participants had hoped the government would give them steroids to tide them over in the short-term - expectations on relaxation on LTCG as stimulus to boost demand were broadly belied. However, for the marathoner, this budget promises quite a bit.

So first a bit of perspective, to view from the prism of marathoner about the past - when we look at a block of 5 years, we see 2 broad areas which have seen a significant increase in government spending. First was increase in salaries and pension to 3.2 million central government employees. Over a block of 5 years (2014-19 over 2009-14 block), the increase in salaries and pension has gone up cumulatively by approximately \$145 billion. This is primarily pay commission recommendation, OROP implementation, etc. The second big change in government spends has been in recapitalising PSU banks (\$45 billion). So, if these were the two big outlay changes, let's also see where the government managed to raise additional resources. As against this, the increased government inflows by increasing excise on oil (\$180 billion) and disinvestment (\$45 billion). Now, incrementally, the salary increases will be far more modest for the next 3-4 years, also the massive recap of PSU banks seem to be nearing its end. For the first time in some time, today's budget actually expects PSU banks to give it some dividend income, as they will become profitable. So effectively, if one looks at a block of the last 5 years, government spending has done the massive heavy lifting.

So while we look at this year's budget and reflect on fiscal deficit (going up) and pressure on government finances, we need to keep in mind that there are potential tailwinds for the government to spend in the coming years, as these large spends like pay commission or PSU bank recapitalisation are mostly behind us.

So, when viewed from the prism of the marathoner, the budget proposals look promising and will help in laying the solid foundations for the economy

With warm wishes



**Ramesh Kr. Rateria**

*President*



## Secretary Message

Dear Members,

The much awaited Union – Budget 2020-21 was presented by the Hon'ble Finance Minister Shri Nirmala Sitaraman on 1st February 2020. The budget aimed at far reaching reforms at energizing the Indian economy through a combination of short term, medium term and long term measures. The budget was based on three pillars viz. Aspirational India, Economic Development for all and Caring Society resulting in Ease of Living of the people. There was nothing specific for or against the polymer sector since decisions on GST is decided by the GST Council that meets from time to time.

The 3rd All India Plastics Association Meet organised by AIPMA was held at Mumbai on 16th January 2020. The meeting was held in the presence of concerned policy makers of the Government of India. IPF was represented by Mr. Sisir Jalan, Hony. Secretary & Shri Amit Kr. Agarwal, Hony. Jt. Secretary.

IPF took a stall at Plastivision 2020 exhibition organised by AIPMA in Mumbai on barter system. Leaflets and Pre-booking forms for participating in INDPLAS'21 were distributed during the exhibition.

On 17th January 2020 the 1st Stake Holders Meeting of Rubber, Chemical & Petrochemicals was held in the Board Room, AIPMA Lounge at Grande – NESCO ground, Mumbai. Shri Sisir Jalan, Hony. Secretary and Shri Amit Kr. Agarwal, Hony. Jt. Secretary represented the Federation in the said meeting.

On 28th January 2020 a Seminar on 'Plastic Waste Management Rules - 2016' was held at Rotary Sadan, Kolkata. The Chief Guest was Dr. Kalyan Rudra, Chairman – WBPCB and Guest of Honour Mr. Rajesh Kumar, IPS, Member Secretary – WBPCB. Both the dignitaries shared their views on Environmental Pollution esp. in relation to Plastics. Dr. Tapas Gupta, Chief Engineer – WBPCB, spoke on Plastic Waste Management Rules 2016 and answered many queries made by members. The welcome address was delivered by Mr. Ramesh Kr. Rateria, President and Vote of Thanks by Mr. Anil Ladha. Mr. Sudarshan Kr. Tawri was the Master of Ceremonies.

On 3rd February 2020 a brainstorming session was organised by the Department of Chemicals and Fertilisers, in their Conference Hall in New Delhi to discuss Perspective Plan issued by EIL (Engineers India Limited) and to formulate a new Policy to curb Import of Plastic/Petrochemicals. Shri Ramesh Kr. Rateria, President – IPF and Shri Sisir Jalan, Hony. Secretary – IPF, represented IPF in the said session.

On 5th February 2020 a Symposium on Analysis of Union Budget 2020 – 21 was held at Rotary Sadan, Kolkata. The speakers were Mr. Naveen Khariwal G., B.Com, F.C.A., an expert on Direct Tax based at Bangalore. He spoke on Direct Tax Proposals in the Union Budget; Mr. Pulak Kr. Saha, a Chartered and Cost Accountant. He is a senior partner in Price Waterhouse & Co LLP. He shared his views and enlightened members on Indirect Tax Proposals. The third speaker was Mr. Suman K. Mukerjee, MA (Delhi), Ph.D, a renowned Economist. He shared his views and enlightened members on the impact of the Budget on the Indian Economy. The Seminar was coordinated by Mr. Ramratan Modi.

In my previous message to you, I had informed members that IPF will be taking a delegation to Chinaplas 2020 being held at Shanghai, PR China and interested members may contact Shri Gautam Ladha, Convenor of the tour in this regard. Arising out of the coronavirus epidemic in China, Chinaplas slated for April 21- 24, 2020 has been postponed. The trade show has been postponed out of concern for the health and safety of participants. The promoters of the trade show and the Federation are closely monitoring the epidemic situation and a new date for the show would be announced later. Once the new dates are announced we will come back to you on the re-scheduled Chinaplas tour.

With best wishes



**Sisir Jalan**

*Hony. Secretary*



## IPF PARTICIPATION IN EKAL RUN MARATHON

Friends of Tribal Society (FTS), Kolkata Chapter organised the second version of Ekal Run marathon on Sunday, 22nd December, 2019 in Kolkata. The event was flagged off from Godrej Waterside, Sec-V, Salt Lake by noted celebrities like Ms. Agnimitra Paul, Apsara Guha Thakurta, Arun Lal and city corporates like Mr. Dipak Jalan, Mr. Vivek Gupta and Mr. Debashis Sen, Chairman-HIDCO. This run with the tagline “Chote Kadam, Bade Irade” was aimed to create awareness among people including the corporates and the youth.

Indian Plastics Federation (IPF) also participated in the event. A booth with theme “Green Kolkata Clean Kolkata” was setup with 2 plastic bottle shredding machine. Members of the federation volunteered the crowd and tried to explain them to put all the empty bottles in the shredding machine. The federation also arranged for Running Slots for its Member in the category of 5 Km & 10 Km, which was well participated by around 57 members. Mr. Amit Agarwal, Joint Secretary of the federation arranged for water sponsorship for the event. Tea, Coffee and light snacks was arranged for all the participants of the event. We thank Mr. Saurabh Garodia, Mr. Sudarshan Tawri, Mr. Rajeev Karnani, Mr. Amit Agarwal and Mr. Manish Singhania for taking active part in participation of IPF in the above event.



**GOLDEN JUBILEE OF SHRI AMAR SETH IN POLYMER INDUSTRY**

Rajda Group celebrated the completion of 50 golden years' of Shri Amar Seth in the Group as well as his dedicated service of 40 years to the polymer industry. IPF office bearers and other members were invited to join the Rajda Group felicitation ceremony on Friday, the 10th January 2020 at the Banquet, Ideal Plaza, Sarat Bose Road, Kolkata. IPF members also felicitated Mr. Amar Seth for his contribution to the Federation. The felicitation ceremony were attended by Shri Ramesh Kr. Rateria, President, Shri Sisir Jalan, Hony. Secretary, Shri Amit Kr. Agarwal, Hony. Jt. Secretary, Shri R. K. Kasera, Past President, Shri K. K. Seksaria, Past President, Shri Alok Tibrewala, Past President, Shri Jayanta Bandyopadhyay, Executive Secretary and many other members of IPF.



**Holi Get Together**

**SAVE THE DATE**

**ON SATURDAY, 7TH MARCH, 2020**  
**AT OJAS BANQUET FROM 6.30 PM ONWARDS**  
**86A, Topsia Rd, Seal Lane, Topsia, Kolkata**

# IPF PARTICIPATION IN PLASTIVISION INDIA 2020 AT MUMBAI

During Plastivision 2020 exhibition from January 16-20, 2020 organised by AIPMA in Mumbai, IPF took a stall that was received on barter system. Leaflets and Pre-booking forms for participating in INDPLAS'21 were distributed during the exhibition. Mr. Sisir Jalan, Hony. Secretary, Mr. Amit Agarwal, Hony. Jt. Secretary and many Executive Committee members of IPF presented at IPF stall.



# IPF MEMBER'S PARTICIPATION AT PLASTIVISION INDIA 2020 EXHIBITION IN MUMBAI

M/s Aglo Polymers Pvt. Ltd. and Winners Labels LLP participated in Plastivision Exhibition 2020 from 16-20, 2020 in Mumbai. Some sanp shots of their participation are given below :



**The above photos were received from M/s Aglo Polymers Pvt. Ltd. and Winners Labels LLP**

# SEMINAR ON PLASTIC WASTE MANAGEMENT RULES 2016

On 28th January 2020 a Seminar on ‘Plastic Waste Management Rules - 2016’ was held at Rotary Sadan, Kolkata. The Chief Guest was Dr. Kalyan Rudra, Chairman – WBPCB and Guest of Honour Mr. Rajesh Kumar, IPS, Member Secretary – WBPCB. Both the dignitaries shared their views on Environmental Pollution esp. in relation to Plastics. Dr. Tapas Gupta, Chief Engineer – WBPCB, spoke on Plastic Waste Management Rules 2016 and answered many queries made by members. The welcome address was delivered by Mr. Ramesh Kr. Rateria, President and Vote of Thanks by Mr. Anil Ladha. Mr. Sudarshan Kr. Tawri was the Master of Ceremonies.



## SYMPOSIUM ON ANALYSIS OF UNION BUDGET 2020-21

On 5th February 2020 a Symposium on Analysis of Union Budget 2020 – 21 was held at Rotary Sadan, Kolkata. The speakers were Mr. Naveen Khariwal G., B.Com, F.C.A., an expert on Direct Tax based at Bangalore. He spoke on Direct Tax Proposals in the Union Budget; Mr. Pulak Kr. Saha, a Chartered and Cost Accountant. He is a senior partner in Price Waterhouse & Co LLP. He shared his views and enlightened members on Indirect Tax Proposals. The third speaker was Mr. Suman K. Mukerjee, MA (Delhi), Ph.D, a renowned Economist. He shared his views and enlightened members on the impact of the Budget on the Indian Economy. The Seminar was coordinated by Mr. Ramratan Modi.





# Segregate and Dispose Your Wastes Responsibly



# Keep Your City Clean During Monsoons



**Use Plastics  
Responsibly**



## Redefining Plastic Recycling through Monomerization: A Circular Economy Approach

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The Plastics industry has synchronized itself with the emerging drifts of the modern economy, circumscribing various unique properties on low-cost efficacy [1]. Their usages have increased almost twenty times from the last couple of decades and are predicted to escalate at the same rate for the upcoming twenty years. With the advent of cheap plastics packaging arrangements, everyone dwells in the ‘plastic age’ irrespective of their economic strata [2]. The advantages of these plastic products are often complemented with various disabilities, which are being magnified daily. Considering the economic perspective, more than 95% of the plastic packaging materials lose their market value worth USD 80- USD 120 billion annually after its first cycle concludes. Out of the lingering 5%, a little above 32% of the plastic products cannot be channelized to their respective recycling wing, deteriorating the global economy on a secondary level by disrupting the waterways along with the urban and the rural infrastructure [2]. Alleviating these problems ( let’s say clogging of the drainage systems- urban infrastructure) appended with addressing the global greenhouse gas emissions merge to induce a gross cost of USD 40 billion annually, undermining the profit margin of the plastic market. The emergence of the ‘Novel Plastics Economy’ was cultivated, keeping the concept of ‘circular economy’ in the backdrop. With the optimization in the profit margin along with keeping the price of the plastic products low, the new economic intuition aims to provide a more systematic and collaborative approach to value the plastics market and supply chain [3].

To catalyze the concept of the revolutionary plastic economy, along with minimizing the demands of non-renewable materials and steer to a sustainable environment, the most explicit trail to traverse is by fabricating a circular economy approach with the non-renewable products and sustainability within the loop. The process is usually carried out via depolymerization, where the polymers are chemically treated to synthesize the monomers elevating the value of the plastic market, demand, and the industry [4].

This brief panorama of the authors put forward the spotlight of the ‘monomerization’ process and how this approach may yield not only a circular economy but also an environmentally benign atmosphere in the context of the grooming plastic industry.

Well, we all know that the petrochemical manufactures are the monomers for the synthesis of the plastics and polymers. But in recent times, they have been in the spotlight for reversing the trend- which means they are converting the plastics into the monomers, thus taking a step forward towards the dream of sustainability and addressing the environmental concern. Plastic products and packages are indeed amalgamated with our day to day activities, starting from food preservation to health care [3, 4]. Advanced materials, in this era, has transformed the technology of connectivity and the innovations of light-harvesting materials using plastics material. We all believe that our lifestyle is improved with the introduction of plastics material, but to give a quantified value, we must say that every year we dump around 150 million tones of plastics, making it nearly around twice the amount of plastics we produce each year. Thus we have the source- the petrochemical industries who are currently addressing the issue apart from the downstream industries to drive the steering more towards in the path of recyclability [5].

The prime priority in aligning the monomerization process along with the circular economy is to develop a robust strategy to address the after-use plastics economy. Not only has this included an effective plan to recycle the plastic wastes chemically, but significances are also being laid on how to prevent the leaking of plastics into the environment from the waste stream, which helps enable the metamorphism to renewably sourced feedstock by reducing its scale. Considering the data which reveals that only 5% of the plastics processed after their first life cycle are economically viable, there is an immediate need to impact the material value and the reprocessing routes of these materials for a sustainable economy [1, 2]. Works of the literature suggest multiple optimizations to alleviate the problem ranging from establishing a cross value chain dialogue working principle until upgrading the secondary markets of plastic recyclables using the scale-up matchmaking mechanisms. Reusing proves to be the most attracting recycling techniques, especially in the business-to-business (B2B) sector covering the elemental commercial products like films, beverages bottle, and flexible plastics packaging. Although the process

can create a substantial impact on the economy if diverted across companies and industries, the path fails to amplify the economy. The advanced monomerization process, which operates at a larger scale, can embroider the economy as it adds initiates the loop of the circular economy, heightening the process value once it circulates through the loop [2].

We do have a large number of Petrochemicals Company who have already launched their ideas and their prototypes to solve the mathematics of bringing back the dumped plastics back into the cycle of production.

Eastman Chemical, a Tennessee based petrochemical company, had launched its prototype on the technology based on the carbon renewing keeping the backdrop of the circular recycling technology in contrast [6]. Their latest development aims to convert the waste complex plastics into the molecular structure, from which they can fabricate synthetic fibers to be used in textiles and healthcare products. A joint venture between Styrenics and Chevron Phillips Chemicals Corporation has developed a methodology to drive the polystyrene waste into the cycle of polymerization from the monomer [7]. Polystyrene, which they produce after the recycle treatment (PolyUsable), gives similar properties as compared to the pristine Polystyrene making it a breakthrough in the circular recycling system [8]. Saudi Basic Industries Corporation has invested in dreaming of converting plastic products such as battles and films directly into its original monomer [9]. The project is all set up and is scheduled to boost off at 2021 in the Netherlands. Suez made collaboration with LyondellBasell and Karlsruhe Institute of Technology in Germany in 2018 to focus on the delivery of the waste plastics resins into its original feedstock [10].

Being in the field of Polymer Science and Engineering for more than two decades, we have come across the biggest misconception about plastics recycling that any plastics can be melted and reformed into a new one. The real fact is that every individual plastic has a diverse recycling strategy since their glass transition temperature and the degradation temperatures vary. In some cases, due to the complexity of the structures and the phase distribution of the polymers in the matrix, it turns out to be very arduous to recycle each plastic individually [9]. This being stated, there is the problem of the waste collection process, which is yet another barrier for the entire recycling process. In many parts of the country, the plastic waste is amalgamated with odor, glass chinks, or even adhesives contaminating the plastics. Thus making the recycling processes a much longer process, and hence the effective cost of the recycled product increases.

All this while, we knew petrochemical companies would convert oil and natural gases into monomers, which would then be converted into polymers and plastics. But in the present trends, they are creating ways to develop new techniques to extemporize on the chemical recycling together with the phenomenon of mechanical recycling paving the way for these waste plastics to metamorphose into reusable products [3]. Leading petrochemical companies have decided to incorporate circular recycling to stream the polymers back to the mainstream channel of the monomers, which can be refurbished into the desired polymers keeping the original properties almost intact, thereby catalyzing the process of 'monomerization.' The companies predict that the process can be used several times without deteriorating the fundamental properties of the polymer from which the cycle begins. The chemical recycling of plastic waste provides companies with an entire set of new ideas and opportunities [3]. The idea of the circular economy is based on the fact that we can recycle materials. The scale ranging from liquid fuel to packaging materials, plastics, and its derivate have pushed the boundaries to rediscover a novel domain of economy of the circular trend.

The perspective of setting up this new visionary economic system is to eliminate the fact of plastics being treated as a waste product after its life cycle ends. Rather than a mere piece of junk, the concept induces that the plastics materials are 'monomerized' back to its original form, supporting the postulates of the circular economy [1]. Even with the advanced designs and engineering tools, it has been not possible for the science to device perfect methodologies to achieve a complete transformation of the economic structure, which is reinforced on the plastics industry. Europe, being one of the most developed countries, can only manage to recycle 53% of the plastics economically and environmentally efficiently after their completed life cycles [1]. While the recycling percentages still depends on various secondary and tertiary factors such as the oil prices and the balance of the stock market, there are multiple scopes of opportunities to be invested today – and even where not undividedly adaptable in its present stage, the New Plastics Economy offers a lucrative target state for the global value chain and governments to collaboratively innovate towards sustainability. The approach may be transited via the three underlying principles as follows

1. The quality and the uptake of the recycling process shall have to be enhanced- We believe that a cross value chain methodology along with establishing a Global Plastics Protocol may tune the perspective of the end-use recyclability of the plastic products [1].

The regional differences and the innovation should be aligned more with the materials and their sustainability to suit the value chain adequately.

2. Although scaling up the reusable domain in the business-to-business (B2B) sector is developed, stresses should be laid on the 'monomerization' process involving chemical and physical recycling methodologies to accelerate the targeted business-to-consumer (B2C) sector (such as plastic bags).
3. Industrially compostable plastic packaging bags also need to be scaled up to balance the loop of the circular recycling. The recycled monomer stream shall not be equivalent to the natural product in terms of quality and quantity. To compensate for the loss in the product quality, the compostable bags must be introduced, especially for the business-to-consumer (B2C) sector of the plastics market chain [1-3].

Processes such as chemical and mechanical recycling have enabled us to broaden the perspective of how waste can be destined for a new journey traversing the circumference once again. As an individual, we believe these recycling techniques, along with technological enhancement, shall give a newer dimension to the plastic industry both in terms of economy and sustainability. The petrochemical industries, together with the academicians, scientists, technologists, entrepreneurs, and budding scholars, shall positively add a superior facet in the field of plastic and polymer realm, redefining both the economy and the environment.

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### Reliance commitment towards enhancing customer's business sustainability

*Shambhu Lal Agrawal, General Manager  
Elastomers Customer Support Centre (ECSC)  
Reliance Industries Limited, Vadodara*

Invention of a wide range of synthetic rubber took place in early 1900 because of Natural rubber supply crisis during World War-II. Styrene Butadiene Rubber and Poly Butadiene Rubber were quickly accepted and became popular within the industry. Subsequently industry started to use these rubbers in essential components of many applications either as a part or full replacement of Natural Rubber on sustainable basis for cost effective and performance improvement. Polyisobutylene and Butyl Rubber were relatively latest development in this series and Halo-butyl rubbers were further invented latter on in 1960. Though India is the second largest consumer of Butyl Rubbers, we were not having any butyl rubber manufacturing plant in India and the entire quantity was required to be imported till the middle of 2019 resulting in limited conventional application like Tire Tube, Bladder and Inner liner.

With an objective of making India self-sufficient in Butyl rubber manufacturing, Reliance Industries Limited has collaborated with Russian petro-chemical giant SIBUR and formed a Joint venture company Reliance Sibur Elastomers Private Limited (RSEPL) at Jamnagar (Gujarat). RSEPL will be 5th largest Butyl/Halobutyl manufacturing company in the world once the plant runs at full capacity. Currently Reliance is producing various rubbers viz., PBR & SBR (general purpose) and Butyl rubber (speciality purpose) in India. These rubbers can contribute to the society through better environment management with newer applications in agriculture, construction, automotive, pharmaceutical, materials handling and various other industrial usage. With expansive distribution and supply network at Reliance Industries Limited, it is expected to support business sustainability of rubber product manufacturers.

Elastomers Customer Support Centre (ECSC) has been established to provide advanced technical service to all stakeholders of the synthetic rubber industry. With the presence of a highly qualified team of engineers, ECSC caters to a wide range of industry requirements like New product & application development, Testing support, Developing technical data base, Conducting customer workshops and educational seminars and supporting customers in product certification and promotion. We ensure that our well-established customer support structure, will be able to maintain a sustainable and prosperous relationship with our customers – one that exceeds all expectations.

At Relflex, we strive to develop new synthetic rubber products, that will support our customers to the forefront of the industry. Our world-class Elastomers Customer Support Centre (ECSC) with its state of the art facility at Vadodara is committed to support the rubber product manufacturers in developing innovative rubber products and application. ECSC has been established keeping the most ambitious customer demands in mind, while adhering to the highest global standards in terms of technology and safety.

## PACKAGING MADE FROM RENEWABLE PLASTIC AND POST-CONSUMER RESIN

Working to drive the circular economy in packaging as well, one of its main business segments, Braskem announces another partnership to leverage the development of sustainable solutions. All 1-liter and 5-liter packaging of the Brazilian company Biowash, a pioneer in the development of 100%-biodegradable natural homecare products, now will be made from a mixture of renewable plastic, made from sugarcane, and post-consumer resin (PCR).

“The initiative reinforces the movement towards the circular economy, which is very important to Braskem and depends substantially on working together with our clients, partners and society in general. In this context, we are seeking more partnerships to develop new solutions that meet market trends, considering important aspects such as prior selection of raw material, design and the product’s reintroduction into the production cycle through recycling,” explained Rafaela Baldin, who is the client’s main interface at Braskem.

Reinforcing the importance of collaboration, the partnership also includes the converter Greco & Guerreiro, which is responsible for producing and supplying the new sustainable packaging to Biowash. The containers, which are used for concentrated multipurpose cleaners, laundry detergent and dishwashing soap, will contain 60% Braskem’s biobased plastics and 40% PCR resin obtained from recycled plastic products.

Since more than half of its composition is the biobased I’m green™ plastic, which during its production captures CO<sub>2</sub>, an important greenhouse gas, the solution captures 6.30 tons of CO<sub>2</sub> every year, which represents a reduction of up to 168%

in emissions compared to conventional packaging solutions. According to Braskem, the volume of CO<sub>2</sub> captured every year by the product is six times larger than the amount of CO<sub>2</sub> absorbed by 1,000 new trees grown over ten years.

And because it contains post-consumer resin, the packaging is even more sustainable, since it contributes to plastic waste being used as a raw material and gaining a new use in the production chain. “Using 40% natural PCR incorporates more sustainability into the packaging, while improving, without the use of dyes, the visual impact, which makes a difference at the point of sale. The collaborative effort, the awareness raised, the social inclusion of recyclable material collectors and cooperatives and the focus on circular economy combine all the values that have guided the business of Greco & Guerreiro over its 30 years in the market,” said Marcelo Guerreiro Mason, the company’s sustainability director.

According to Biowash, the partnership goes far beyond its permanent commitment to quality and to respect for the environment. “This is Biowash’s first step in delivering sustainable packaging, but we are still counting on consumers to do their part, by always sending their bottles for recycling,” said Becky Weltzin, the company’s managing-partner.

In addition to signing partnerships for developing and improving its I’m green™ portfolio, which includes biobased and post-consumer solutions, Braskem continues to invest in actions to strengthen conscientious consumption and the contribution of plastics to the sustainable development of society.

“The packaging addresses important issues, such as the safety of the final product, but it also represents the face of the brand and reinforces its identity in the market and with consumers, which leads us

to believe that the partnerships we forge in this segment will help us convey a positive message to society. More importantly, we believe that engaging in the value chain will help us to advance in our purpose, which is to improve people’s lives by creating sustainable solutions in chemicals and plastics, such as the new packaging for Biowash,” concluded Baldin.

*Source : [www.braskem.com](http://www.braskem.com)*

## HOW WILL THE CORONAVIRUS EPIDEMIC AFFECT THE PLASTICS INDUSTRY?

The coronavirus outbreak has sparked economic volatility in recent weeks. While broader effect is still hard to gauge, the epidemic will likely to hit both the Chinese and global plastics industries’ market outlook.

How will coronavirus epidemic affect the plastics industry? CPRJ asked the opinions of some key industry players.

**Yizumi: It will take some time to recover**  
James Zhang, GM of Yizumi IMM Division and Director & DGM, Yizumi Group commented: “The industry’s recovery was very obvious in the second half of 2019. However, the recent coronavirus outbreak has brought uncertainties.”

He believes that the plastics industry will need some time to recover after the epidemic. The driving force for economic development will mainly come from two areas

Firstly, the Chinese economy will continue to develop and upgrade rapidly, which will create continuous demand for plastic machinery. As the trends of 5G, advanced medical treatments, circular economy and sustainable packaging are emerging, existing machinery and equipment have to be replaced.

Meanwhile, the development of technologies such as automation, digitalization and smart manufacturing, energy-saving and light weighting, and multi-material molding, will boost efficient and sustainable production.

Secondly, globalization will bring new opportunities. Chinese enterprises will further expand in overseas markets by establishing production facilities and sales networks.

#### **ENGEL: Chinese economy will regain momentum**

According to the analysis of Gero Willmeroth, president for East Asia and Oceania at ENGEL, the market slowdown in 2019 was mainly driven by the downturn of the automotive industry, and other industries like medical and packaging were not that impacted.

“The outbreak of coronavirus outbreak will have an impact in two ways. Firstly, customer confidence for consumption will be dropped as health issue is the main focus now. Secondly, the production output is reduced due to workers cannot resume work and the supply chain has interruptions,” he explained.

Nevertheless, Gero Willmeroth is confident that the people of China have the strength and ability to overcome difficulties, and the Chinese economy will regain momentum before the end of 2020.

#### **FCS: Investment to increase after the epidemic is over**

“If the epidemic can be controlled before the end of February, the industry will have the opportunity to grow steadily in the first half of the year. If not, the first half of the year is expected to decline,” commented Jerry Wang, Chairman of Fu Chun Shin (Ningbo) Machinery Manufacture Co., Ltd.

From another perspective, after the epidemic is over, there should be a wave of

development, the investment will increase in the short term because the previous plans were backlogged and delayed, he remarked.

#### **WITTMANN BATTENFELD: Resume operation and adjust market strategy**

To Terry Liu, General Manager, WITTMANN BATTENFELD (Shanghai) Co., Ltd., the situation of the epidemic now cannot be underestimated, and the company is trying to find ways to deal with it proactively.

“The most important thing is to resume operation first, and then adjust the market strategy after the epidemic by reinvestigating the needs of customers, promoting appropriate machines and implementing proper sales strategies,” he said.

#### **JCTIMES: “Waking up” the Chinese manufacturers**

President of JCTIMES Liang Bin, told CPRJ that this epidemic has given the Chinese manufacturing enterprises more vigilance and understanding to the current situation of the industry.

Prior to this epidemic, the Chinese economy was more focused on rapid development, he explained, this sudden incident may trigger an economic slowdown or recession in advance, generally “waking up” the enterprises to return to solid developments such as improving quality, service and management.

#### **Demag: The market will show a significant increase thereafter**

Pietro Scattarreggia, the Managing Director of Demag Plastics Machinery (Ningbo) Co., Ltd. also agreed that the plastics machinery market started to recover in the last quarter of 2019.

“The current situation very likely will decelerate the project activities, not only in the plastic industry, but also other industries will be affected,” he said.

However, he is still optimistic about the future. “We are confident that after the outbreak will be under control and solved, the overall economy and also the plastics machinery market will show a significant increase.”

“Even we all are facing a tough situation in the last days and very probable also in the next two weeks, we will overcome this situation with common efforts very soon,” Pietro Scattarreggia emphasized.

#### **INEOS Styrolution: The demands are not reduced, just suppressed**

Jary Liao, Regional Industry Lead, Packaging at INEOS Styrolution Polymers (Shanghai) Co Ltd., also expects the plastics industry to rebound after the coronavirus outbreak.

“In fact, the markets in January actually showed signs of recovery or even relative growth, such as the automotive and home appliances. This epidemic was not expected,” he mentioned.

“I expect the plastics industry to rebound because the epidemic is just suppressing most of the demands, but not really reducing them,” explained Jary Liao.

*Source: CPRJ Editorial Team*

## **PLASTICS – THE GREAT HEALTHCARE ENABLER**

Plastics save lives. Pure and simple. What often gets lost in the demonization of plastics due to their waste-related challenges is the fact that modern healthcare is heavily reliant on the material and, in fact, could barely function without it.

Last October, National Geographic magazine ran a story titled “Can Medical Care Exist Without Plastic?”, and noted that “Single-use plastic can be an attractive option for hospitals – cheap, durable, and easily tossed out – and each new fresh plastic container or covering offers a newly sterile environment. That’s why clinicians cover themselves and everything they use

in plastic.”

Various types of plastics and elastomeric materials serve countless uses in the medical and healthcare arena – from basic items such as gloves, tubing, eyeglasses, blood bags and disposable syringes, to high-tech, biocompatible applications such as heart valves, joint replacements and 3D-printed prosthetic limbs.

Ultra-high molecular weight polyethylene (UHMWPE), for example, is excellent for use in prosthetics, while polypropylene’s high-heat properties make it ideal for applications where autoclave sterilization and radiation stabilization processes are required, according to global materials supplier Trinseo (formerly known as Styron).

Companies such as Jabil-owned Nypro Healthcare also delve deeply into the engineering aspects of medical devices. Nypro focuses heavily on mechatronics, a design process that involves integrating mechanical and electrical hardware with software processes, thereby enabling device designers to deliver highly sophisticated mechatronic functionality.

“One of the major healthcare trends affecting mechatronics technology is miniaturization,” notes Nypro. “Ever-smaller instruments, devices, and equipment are being developed to enable less-invasive surgical techniques that enable faster recovery.” The use of micro-actuators and micro-sensors is driving the development of tiny mechatronics designs for everything from scientific instruments for DNA sequencing to micro-pumps and auto-injectors for drug-delivery products.

Additive manufacturing also is playing an increasing role in healthcare delivery. Germany’s Evonik Industries AG, for instance, recently invested in Meditool, a Chinese 3D printing start-up specialized in implants for neuro and spinal surgeries. Using 3D models generated by Meditool’s own software, Evonik can print implants using its high-performance polyetheretherketone (PEEK) polymers.

Other materials suppliers are striving to make plastics more resistant to the harsh cleaning chemicals often encountered in hospitals and operating rooms.

Minnesota-based compounder RTP Company has developed a proprietary alloy

technology designed to maintain strength, functionality, and integrity, even with repeated exposure to hospital cleaners used to disinfect medical devices. The firm says these thermoplastic compounds, known as the RTP 2000 HC series, “can help solve cracking issues in existing devices and open a new realm of possibilities for the design of hospital equipment and plastic housings that require frequent disinfection, such as mobile ultrasound and x-ray machines, enteral feeding devices, drug infusion pumps, blood filtration equipment, and more.”

RTP also supplied a glass fiber-reinforced PC/ABS alloy compound known as the RTP 2500 Series, to Novare Surgical Systems to use in its RealHand line of minimally invasive surgical instruments. Novare has integrated its RealHand HD technology into a series of endo-laparoscopic instruments such as graspers, dissectors, scissors, and needle drivers.

Kraiburg TPE, meanwhile, recently launched a new line of thermoplastic elastomers that not only hold certifications for healthcare applications in accordance with European Union and U.S. Food and Drug Administration standards but can also be combined directly with polyamides. Dubbed the MC/AD/PA Thermolast M series, Kraiburg says it is now introducing “the world’s first TPEs for medical applications in composites with polyamides – including transparent PA12.” The compounds are fully certified and suitable for a variety of attractive medical devices, including those used for in vitro diagnostics.

PolyOne Corp. also supplies a number of materials for use in healthcare applications, including for catheters and tubing, and various medical devices. Recently, though, it tackled a slightly different challenge – helping a nonprofit charity called Global Vision 2020 to create a simple, effective way to bring clear eyesight to people living in extreme poverty. The resulting diagnostic device, called USee, allows minimally trained practitioners in the field to accurately test the eyesight of people in impoverished areas.

Another materials firm, Germany’s Covestro, worked closely with Ohio-based medical equipment maker Enable Injections to create a new, on-body drug-

delivery system to help patients who need biologic drugs derived from organic sources to treat cancer, diabetes and other diseases.

Biologics need to be injected or infused. Typically, this has required inconvenient visits to specialty healthcare facilities or painful self-injections of high-viscosity medications. Now, patients can wear this Enable device and easily self-administer the doses they need, when they need them. The new system – made with Covestro’s Makrolon Rx1805 polycarbonate in a purple tint, and its Bayblend M850 XF PC/ABS blend – provides the necessary safety, durability and bio-compatibility while being aesthetically pleasing.

And nowhere is plastics more prevalent in healthcare than in packaging. Most drugs are dispensed in some sort of plastic bottle, container or foil-backed blister pack, and packagers increasingly are adding “smart” technologies to such products to improve safety while also helping users to keep track of the medications they are taking.

Austrian packaging group Alpla, for example, recently introduced CRC justONE, a very light, childproof closure, manufactured in just a single injection molding process with straightforward assembly. Normally, there are three parts to a childproof closure with a tamper-evident band that can only be opened by simultaneously pushing and turning the closure. And these parts typically are produced in three separate production steps and assembled later. This new production process from ALPLApharma, Alpla’s newly consolidated healthcare brand, has now streamlined this into a significantly more efficient workflow.

National Geographic asked the right question recently. And, in short, the current answer is, “No, safe, efficient medical care today cannot exist without plastic.”

Come to CHINAPLAS 2020 in Shanghai this April 21-24 to see first-hand some of the amazing technologies that are helping to enable modern medicine. For more information about CHINAPLAS 2020, please visit the official show website at [www.ChinaplasOnline.com.2020](http://www.ChinaplasOnline.com.2020)

*Source: CPRJ Editorial Team (SC)*

## EVENT CALENDAR

### 3P - PLAS PRINT PACK PAKISTAN 2020 TRADE FAIR

Profile of exhibit are Bag Making Machine, Injection Moulding, Blending, Marking, Coating Mould Making, Extrusion, Palletizing, Film Blowing, Resin & Resin Processing, Grinding, Heating, Waste Processing, Auxiliary Equipment, Accelerators, Auxiliary Equipment, Crushers & Mixers, Chemicals & Compounds, Dryers, Calorimeters & Spectrophotometer, Temperature Controls & Chillers, String and Labels.

**Organisers :** FAKT Exhibitions Pvt Ltd  
06 March 2020 - 08 March 2020, Pakistan

### 5TH PLASTIVISION ARABIA 2020 TRADE FAIR

An event of international stature, Plastivision Arabia, will create an opportunity for all the components of the plastic and polymer industry to directly connect with their potential customers. The excellent exhibiting facilities offered by this event will enable the exhibitors to present a wide range of the following, Raw Materials, Auxiliaries, Thermoplastics, Thermoplastic elastomers, Coating compounds, Synthetic fibres, bristles, tapes, Paint resins, Reinforcing fibres, materials, polymerization auxiliaries, Parts and components.

**Organisers :** The All India Plastics Manufacturers Association India / Expo Centre Sharjah  
16-Mar-2020 - 19-Mar-2020, United Arab Emirates

### WPC 2020: 35TH ANNUAL WORLD PETROCHEMICAL CONFERENCE CONFERENCE

This is an international gathering of decision-makers exploring critical issues surrounding the chemical industry and strategies to manage them successfully. This must-attend event features: 160+ speakers from IHS Markit and across the petrochemical industry; Over 1,400 attendees from 45+ countries; breakout tracks to explore major value chains; in-depth training workshops and special programs to drill more deeply into key industry sectors; countless networking opportunities with a key gathering of your industry peers. This year's theme is: "20/20 Vision: Forgoing new futures."

**Organisers :** IHS Markit  
24-Mar-2020 - 27-Mar-2020, New Orleans, LA, US

### WORLD HEAVY OIL CONGRESS & EXHIBITION 2019 EXHIBITION

Providing a convening platform for the global heavy oil community, across the entire value chain, to convene, exchange knowledge, and do business the World Heavy Oil Congress & Exhibition (WHOC) offers companies and heavy oil professionals exceptional opportunity to network, share project insights, generate new business, and meet global heavy oil players.

**Organisers :** dmg::events (Global Energy) UK  
01-Sep-2020 - 03-Sep-2020, Oman

### CHEM SHOW EURASIA 2020 EXHIBITION

Chem Show Eurasia features Specialty Chemicals, General Chemical, petrochemical and chemical intermediate products will be exhibited Chemicals Department, Laboratory, Technology, Test-Measuring Instruments, which auxiliary and Consumable Materials will exhibited Department Laboratory, Process-Automation Industry, Packaging, Recycling, Logistics, Safety and Environmental Technologies presented to Technology Department and Pharmaceuticals, Food, Cosmetics and etc.

**Organisers :** ARTKIM GROUP Turkey  
05-Nov-2020 - 07-Nov-2020, Turkey

### ARABPLAST 2021 TRADE FAIR

ArabPlast, the largest trade expo for plastics, petrochemicals and rubber industry in the Mena region, is set to bring together key players and experts in the sector from around the world in Dubai. The trade expo shall showcase innovative ideas, plastic/rubber processing technology, pre and post-processing systems, plastic packaging technology, injection moulding, blow moulding, wrapping technology, extrusions, chemicals and additives, semi-finished goods, engineering plastics and plastic products, and more.

**Organisers :** Al Fajer Information & Services (AFIS) UAE  
09-Jan-2021 - 12-Jan-2021, United Arab Emirates

### PLASTINDIA 2021 EXHIBITION

Profile of exhibit are Specialty chemicals, raw materials, recycling, post processing equipment, processing machinery, quality control and testing equipment, trade promotion bodies and associations, research and development, education and training, technical publications, ancillary equipment / instrumentation, semi-finished and finished products.

**Organisers :** Plastindia Foundation  
04-Feb-2021 - 09-Feb-2021, India

**IPF WELCOMES TO NEW MEMBERS TO ITS FAMILY APPROVED IN  
THE EXECUTIVE COMMITTEE MEETING HELD ON 6/12/2019**

Sl.No.	Name of the Company	Class of Membership	Membership Number
1	A.B. POLYPACKS PVT. LTD.	Life Manufacturer member	LM-399
2	AJONTA PLAST	Life Manufacturer member	LM-412
3	AURUM CHEMICALS PVT. LTD.	Life Manufacturer member	LM-404
4	BAISHALI STEELS PVT. LTD.	Life Manufacturer member	LM-400
5	GLEN INDUSTRIES PVT. LTD.	Life Manufacturer member	LM-405
6	JAI HIND PLASTIC	Life Manufacturer member	LM-401
7	MA PLASTIC ENTERPRISE	Life Manufacturer member	LM-407
8	NAWKIRAN POLYPLAST PVT. LTD.	Life Manufacturer member	LM-408
9	NKB EXTRUSIONS PVT. LTD.	Life Manufacturer member	LM-413
10	NAYAN PLASTIC WORKS	Life Manufacturer member	LM-409
11	POLYMER INDUSTRIES	Life Manufacturer member	LM-406
12	S. K. BUSINESS	Life Manufacturer member	LM-410
13	SBM PIPE INDUSTRIES PVT. LTD.	Life Manufacturer member	LM-403
14	SWASTICK INDUSTRIES	Life Manufacturer member	LM-411
15	WINNERS LABELS LLP	Life Manufacturer member	LM-402
16	ESS DEE ENTERPRISE	Manufacturer Member	M-312
17	PUREPET POLYMERS LLP	Manufacturer Member	M-314
18	SARADA INDUSTRIES	Manufacturer Member	M-315
19	SHREE SAI ADARSH POLYMERS	Manufacturer Member	M-316
20	SHUBHLABH PLASTO PVT. LTD.	Manufacturer Member	M-317
21	SWETA POLYSACK PVT. LTD.	Manufacturer Member	M-319
22	OM SAI POLYMER	Manufacturer Member	M-313
23	SPINO POLYMERS	Manufacturer Member	M-318
24	HANUMANDASS AGARWALLA	Life Dealer Member	LDR-114
25	SILVERSON OVERSEAS PVT. LTD.	Life Dealer Member	LDR-113
26	UNIVERSAL TRADE LINKS	Dealer Member	DLR-101

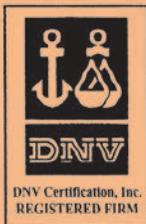
**IPF WELCOMES TO NEW MEMBERS TO ITS FAMILY APPROVED IN  
THE EXECUTIVE COMMITTEE MEETING HELD ON 7/02/2020**

Sl.No.	Name of the Company	Class of Membership	Membership Number
1	JAIWARDHAN POLYMERS INDUSTRIES PVT. LTD.	Life Manufacturer member	LM-416
2	DISHA PLASTICS	Life Manufacturer member	LM-414
3	POLYMAC THERMOFORMERS LTD.	Life Manufacturer member	LM-415
4	ESSMARK OIL INDUSTRIES (P) LTD.	Manufacturer Member	M-320
5	INJECTO POLYMERS PVT. LTD.	Manufacturer Member	M-321
6	SIBCO PLASTIC INDUSTRIES PVT. LTD.	Manufacturer Member	M-322
7	MAA DURGA POLYMERS	Life Dealer Member	LDR-115
8	EVERGREEN PLASTICS	Life Dealer Member	LDR-116
9	TAPARIA CONSULTANTS (P) LTD.	Life Distributor Member	LDS-015

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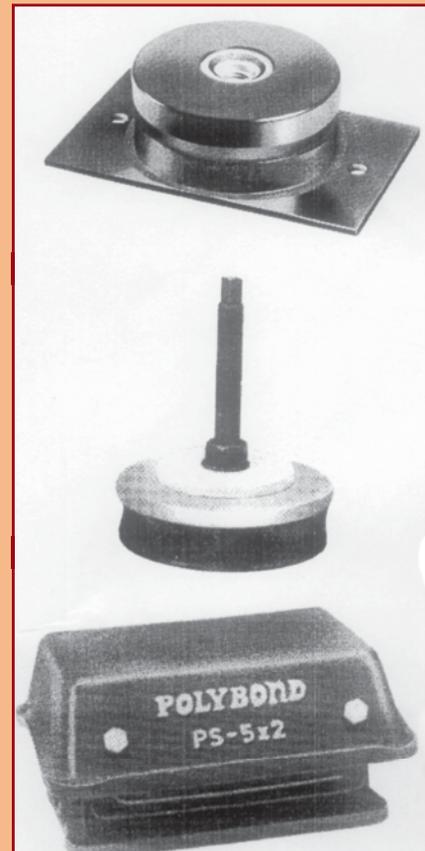
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## MESSAGING MODES – HEARING, OVERHEARING

**Dr. Devdutt Pattanaik**

In Abrahamic mythology, God communicates with humanity through messengers. Judaism informs us how God spoke to Moses, Christianity informs us how God spoke to Jesus, and Islam informs us how God speaks to many prophets from Adam onwards to the final Prophet Muhammad. Messengers hear God's voice and mortals hear the voice of messengers.

However, in Hinduism, gods never directly speak to messengers. There are no messengers. Gods and goddesses share their wisdom and this is overheard by sages who transmit to humanity. Thus, wisdom is overheard in Hinduism; it a choice, not an instruction.

Vedas are called Shruti, that which needs to be heard. It alludes to the oral tradition via which the Vedas were transmitted. They are traditionally called revelations that were received by sages, who transmitted them to humanity, though as per historians these were just inspired poetry composed by poets to attract divine fortune and to win powerful patrons.

In the 19th century, under colonial rule, many scholars assumed that Vedic revelations were similar to the Revelations of God, in the Bible, a belief that is strongly part of Hindutva sampradaya. However, it is not the same thing.

In Sanatana Dharma, the assumption is that knowledge exists in the world, just like oxygen does. We get it if we seek it, if we are sensitive enough to receive it. The one who captures this knowledge is the Rishi. He is the one who sees and hears what others cannot see or hear. The Rishi prepares his body to listen to the vibrations of the cosmos through various disciplines like mantra, yantra, tantra and the practice of tapasya. So, the Rishis are those who become capable of seeing and hearing.

In the Puranic traditions, the concept of overhearing appears. Puranas speak of conversations of divine beings being overheard by animals and humans. Shiva and Shakti are discussing the wisdom of the tantras, when they are overheard by a snake called Patanjali, a bird or parrot called Shuka, a crow called Kakabushandi and a fish that becomes Matsyandranath. So, the tantric tradition is transmitted through those who overheard the gods. Patanjali is linked with Yogasutra, Shuka with Bhagavata Purana, Kakabhusandi with Ramayana and Matsyendranath with the Nath-jogi traditions.

The same concept occurs in the Bhagavad Gita. We do not directly know what Krishna is saying to Arjuna. We are overhearing Sanjaya who is telling Dhritarashtra, what he

overhears Krishna tell Arjuna.

This concept of overhearing is found in the folklore of Ramayana as well, when Hanuman overhears Ram and Sita discussing the Vedas. Thus Hanuman realises that Ram and Sita are not regular humans; they are divine beings in human form. He realises he too has divinity within him awaiting flowering.

Thus in Hinduism, humans are obliged to be voice. Overhearing is a choice. Listening to God's message is not. Hinduism is thus seen as voluntary, Abrahamism is obligatory. Hinduism believes you have many lives and so at the appropriate time, you will overhear and you will be wise. Abrahamism believes there is only one life to hear God's message. Hence the sense of urgency in their stories



Modern businesses follow the Abrahamic model, with instructions, approved by Board of Directors, flowing down via the CEO to all employees. In Town Hall meetings, in annual general meetings, in regular speeches, the leader communicates his message and managers are expected to follow through. Hearing is rewarded.

And yet, people value informal networks of communication. What is overheard in meetings, in corridors, in toilets, messages that the management does not want the employees to know, or does not consider of value to be part of the message. Gossip is valued.

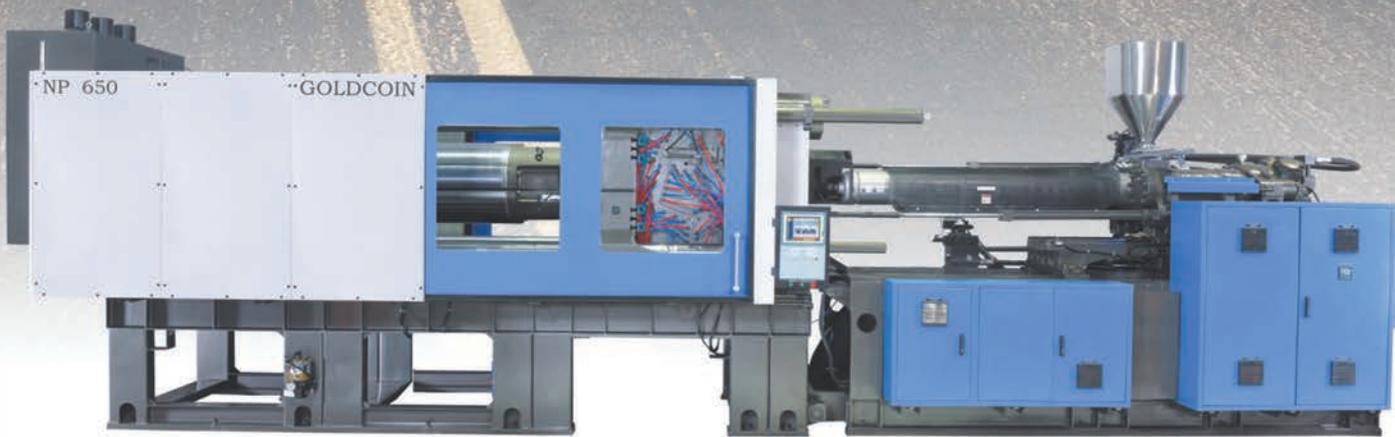
While the authorities dismiss it, the masses value it precisely because authorities dismiss it. In fact, in corporate world what is overheard is valued much more than what is heard.

In politics, journalists are supposed to overhear, not hear. In autocracies, the journalists hear and enable propaganda. In democracies, the journalist overhears and shares to the people, and to the authority, what is the conversation beyond official channels. It helps gauge mood of the people. Ancient Indian kings valued spies therefore, as we learn from Chanakya's Artha Shastra.

In Ramayana, Ram sends spies to find out what people are saying and when they report they are gossiping about Sita, he decides to abandon her, to protect royal reputation. Unlike dictators, he does not punish those who gossip. And unlike justice warriors, he does not argue Sita's innocence. For he knows no one believes authority – any defence will only breed doubt, and cynicism. And so a brutal decision is taken, whereby he destroys his own personal life, no wife, no children, to protect his family reputation and to make people aware of the cost of gossip, that is overheard by royal spies.



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## TO ALL MEMBERS OF THE FEDERATION

MEMBERS ARE REQUESTED TO SEND THEIR GRIEVANCES/PROBLEMS FACED ON GST/SUBSIDY/VARIOUS LICENCES AND ANY OTHER ISSUES TO THEIR RESPECTIVE INDUSTRY IN DETAILS ALONGWITH SUPPORTING DOCUMENTS TO THE IPF SECRETARIAT SO THAT WE CAN PUT THE SAME TO THE CONCERNED AUTHORITIES.

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

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## APPLICATION FOR MEMBERSHIP

To  
The Honorary Secretary  
INDIAN PLASTICS FEDERATION  
8B, Royd Street. 1st Floor  
Kolkata 700 016

Phone: (033) 22175699/5700/6004 Fax: (033) 22176005

E-mail: office@ipfindia.org, Web: www.ipfindia.org

**Membership No**

(To be filled in by IPF Office)

Dear Sir,

I/We desire to be enrolled as a  LIFE  ANNUAL member of category  PRODUCER  
 DISTRIBUTOR  MANUFACTURER  DEALER

(Please tick appropriate box) of the Indian Plastics Federation and agree to contribute the Life Membership fees/Annual Subscription of Rs \_\_\_\_\_ on approval of any member proposal.

In addition to the admission fee of Rs. \_\_\_\_\_ to its funds + GST @ 18%. Payment made by A/c Payee Cheque / Demand Draft

I/We agree to abide by the Memorandum and Articles of Association of the Federation and applicable bye-laws of the Federation from time to time.

Date:.....

Signature.....

(In full with rubber stamp of the Applicant)

<b>Name of Proposer Member</b>	:	
Membership No	:	
Signature of Proposer (With rubber stamp of the Member firm)	:	
<b>Name of Seconder Member</b>	:	
<b>Membership No</b>	:	
Signature of Proposer (With rubber stamp of the Member firm)	:	

(Both the proposer and the Seconder should be valid Members of the Federation)

The above application was accepted by the Executive Committee at its Meeting held on.....

Hony. Secretary

Chairman

(The following Particulars are to be filled in by the applicant)

1.	Name of the Applicant (in Block Letters)	:			
2.	Full address of Registered Office (Attach copies of appropriate Address Proof)	:			
	Full Address of Factory / other Offices if any	:			
3.	Date of Establishment or Incorporation	:			
4.	GST Registration No. (Attach a Self-Attested Copy)	:			
5.	Income Tax PAN (Attach a Self-Attested Copy)	:			
6.	Udyog Aadhar No. (Attach a Self-Attested Copy)	:			
7.	Yearly Turnover of the Applicant Firm Note: In case you are in process of setting up a new unit please furnish a brief write-up	:		Proposed / New	Less Than
				Rs.1.50 to Rs.5.00 Cr	Above 5 Cr
8.	Telephone nos.	:			
9.	Mobile Number	:			
10.	E – Mail	:			
11.	Website	:			
12.	Current Activity of the Applicant (MANDATORY)	:			

13. Constitution of the Company(Please Tick)

Proprietorship                       Partnership/LLP                       Limited Company

14. a) If a Proprietorship concern

Name of The Proprietor	Mobile No.	Email

b) If a Partnership Firm / LLP concern

Sl. No.	Name of The Partners	Mobile No.	Email
1.			
2.			
3.			

*Compulsory documents required-Partnership deed & Partners DIN in case of LLP*

c) If a Limited Company

Sl. No.	Name of The Directors	Director Identification Number (DIN)	Mobile No.	Email
1.				
2.				
3.				

*Compulsory documents required - Form No. 32/Trade License/Memorandum & Articles of Association*

*Note: More than 3 persons cannot be represented as per Article 19 of Articles of Association of the Federation.*

13. Whether any of the above persons have represented .....  
 any other firm who has been a member of this Federation .....  
 in the past. If so, please give name and address of the firm .....

### MEMBERSHIP FEES STRUCTURE

MEMBER CATEGORY	MEMBERSHIP FEES		(RS.)		
	LIFE	ANNUAL	ADMISSION	GST TAX	TOTAL
			FEES	18%	
PRODUCER	1,00,000.00			18,000.00	1,18,000.00
		10,000.00	1,000.00	1,980.00	12,980.00
DISTRIBUTOR	50,000.00			9,000.00	59,000.00
		5,000.00	1,000.00	1,080.00	7,080.00
MANUFACTURER	30,000.00			5,400.00	35,400.00
		3,000.00	1,000.00	720.00	4,720.00
DEALER	25,000.00			4,500.00	29,500.00
		2,000.00	1,000.00	540.00	3,540.00

Payment have to be made by A/c payee cheque/Draft/Pay Order in favour of “**Indian Plastics Federation**” payable at Kolkata

Any individual, Hindu undivided family, association of individuals or companies of others, engaged or interested in plastics industry, trade or allied line having their manufacturing plant, factory, shop or place of business in any part of India shall be eligible for election as a Member of the Federation subject to the provision mentioned hereinafter.

- PRODUCER MEMBER :** Any person, firm or company engaged in the manufacture of one or more than any of the plastics or allied raw materials shall be eligible for election as a Producer Member of the Federation.
- DISTRIBUTOR MEMBER :** Any person, firm or company acting as sales representative of any manufacturing of plastics raw materials and allied products or machinery, accessories, equipments, tools, dies, moulds etc . shall be eligible for admission as a Distributor Member of the Federation.
- MANUFACTURER MEMBER :** Any person, firm or company engaged in the manufacturer of machinery, accessories, equipments, parts, tools, dies, moulds etc. or processing of plastics finished and/or semi-finished products by power operated machinery shall eligible for admission as a Manufacturer Member of the Federation.
- DEALER MEMBER :** Any person, firm or company connected with plastics and allied industry or trade as importers, exporters, commission agents or otherwise dealing in plastics and allied raw materials and/or products shall be eligible for admission as a Dealer Member of the Federation.
- LIFE MEMBER:** Any person, firm or company who is eligible to be elected as a Producer, Manufacturer, Distributor or Dealer Member of the Federation is also eligible for election as Life Member of the Federation.

A Life Member shall pay a lump sum subscription as may be decided by the committee from time to time, provided always that the amount shall not be less than Rs.25000/- or 10 times of annual subscription of a category whichever is higher at the time of his admission. He will not be required to pay any admission fee or annual subscription to the Federation except the above lump sum subscription.

**ADMISSION FEE:**

THE ADMISSION FEE WILL BE RS. 1000/- ONLY.

**GST TAX :**

GST @ 18% or as applicable.

***Please attach self attested photocopies of latest supporting documents as prescribed above, without which the application will not be considered***

\* Article 19 of Articles of Association of the Federation : All firms, associations and companies who are members of the Federation may each nominate up to three persons being Partners, Committee Members, Directors, Managers and Secretaries or other Principal Officers of such firm, Association or Company as their representatives to exercise the rights and privileges of membership of the Federation. The names of such representatives shall be entered in Register maintained by the Federation in order of their priority and all the representatives mentioned or their order may be varied by the members from time to time by notice in writing given to the Hony. Secretary at least seven days before the date from which the alteration may be intended to make effect. If any such representative is disabled by virtue of the reasons mentioned in Article 21 his name shall be removed from the Register.

**EXPLANATION :** It is clarified that the term ‘Managers, Secretaries or other Principal Officers’ shall mean the persons on the regular roll of the employment of the member unit and in case of member unit being a proprietorship concern or partnership firm then the spouse of the proprietor or partners and adult children of such proprietor or partners of the firm whether in employment or not and the information of which shall be communicated to the Federation at least 2 (two) months before the date of any of the General Meeting of the members failing which the said authorized representative shall not be allowed to cast his vote or participate at any meeting. Further the member unit shall give a declaration in the form as may be decided by the Committee of the Federation from time to time on the appointment of such authorized representative together with employment particulars, wherever necessary.

Provided further if any such authorized representative other than the spouse and children as stated herein above ceases to be in the employment of the member unit then the information to that effect shall be communicated to the Federation within 15 days of such happening.

Provided further that such Managers, Secretaries or other Principal Officers other than spouse and children of the Proprietor or Partners of the member unit as stated hereinabove shall not represent more than five members at a time.

Note:

- 1) For any class of membership, if a member is admitted after 30th September in a year, such member shall be required to pay only half of such annual subscription of the year of admission. The first year’s subscription shall be payable at the time of admission unless otherwise decided by the Committee and all subscriptions shall be paid by 30th April each year.
- 2) Please attach extra sheet wherever required.

**U R G E N T**

20/02/2020

**Sub: Updating of Membership Details**

We are in the process to publish IPF Member Directory so we are updating the contact details and other information of our members in our record. We, therefore, request you to kindly give us the details as required below and send the same back to us duly filled in so as to reach the Federation's office by **31st March, 2020**. In case no information is received by the Federation by **Tuesday, 31st March, 2020**, it will be presumed that the existing details in our record are correct.

\*We also request you to kindly send us your membership subscription, in case the same has not been paid till date.

**Company Name with** \_\_\_\_\_

**Mailing Address** \_\_\_\_\_

**\*PAN NO.** \_\_\_\_\_  
**(ONLY FOR OUR RECORD)**

**\*GST NO.** \_\_\_\_\_  
**(ONLY FOR OUR RECORD)**

**\*Name of Representative /** 1) \_\_\_\_\_ **Mob:** \_\_\_\_\_  
**Contact Person**

**(not more than three persons)** 2) \_\_\_\_\_ **Mob: :** \_\_\_\_\_

3) \_\_\_\_\_ **Mob:** \_\_\_\_\_

**\*Activity of your Organisation** \_\_\_\_\_

**\*Telecommunication Particulars:**

**1. Telephone Nos.** \_\_\_\_\_

**2. E-mail ID** \_\_\_\_\_

**3. Website ID** \_\_\_\_\_

**\*Marked are mandatory. Kindly give us the correct information which will be readable properly to avoid any inconvenience in communicating with you in future.**

**(Authorised Signatory with Official Seal)**

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