

## From the Editor's Desk

Welcome to the 4<sup>th</sup> Edition of 'Repol Konnect'!

It has been a year since we started with our initiative 'Repol Konnect'- a newsletter to keep us abreast with new developments, products, industry news & share Reliance-driven efforts to propel growth of polymer industry. In our endeavour, we have received invaluable support and feedback from the polymer fraternity.

FY 2011-12 has seen moderate demand growth in polymer consumption in India & we need to work cohesively to increase penetration of polymers in mass market to realise the untapped potential. Reliance Industries has organised 46 Customer Relationship Management programs & participated actively in 38 industry sponsored programs along with processors, end users & nodal agencies to promote polymer applications, usages & sustainability in FY 2011-12.

We have added customer speak, section to feature growth story of successful organisations into Repol Konnect issue for better participation from processors, end users. The present edition highlights two such organisations in the field of bulk packaging, special features on Plastindia 2012, coverage on 1st Geotextile conference & release of Handbook on geotextile.

We endeavour to continue our relationship & active participation in the future too.

We look forward to your continued support & feedback.

Happy reading.

**C Papparao**



## Handbook on GEOTEXTILES

Bombay Textiles Research Association (BTRA), Centre of Excellence of Geotech **with support from Polymers team of Reliance Industries Ltd.** released the first ever compilation of Geotextiles "HANDBOOK OF GEOTEXTILES".

This book is the **first Indian document** covering Geotextile application for infrastructure

- ❖ 26 Indian case studies of India
  - Roads ( Separation/ Drainage and pavement reinforcement)
  - Erosion control (Geotubes / Geobags)
  - Prefabricated drains for soft ground improvement etc.
- ❖ Profiles of **key manufacturers** & supply-chain for user industry were included
- ❖ **Testing/ Standards** for the geotextiles

This handbook was released by **Shri Sujit Gulati**, Joint Secretary, Ministry of Textiles, Govt of India in presence of **Dr. JN Singh**, Member (Finance) NHAI & other senior Govt. officials in Mumbai on 24<sup>th</sup> February 2012.

First time we now have a document on Geotextile usage in Indian climate. This will serve as a basic reference material for NHAI, PMGSY, CPWD, Contractors and consultants. This document will facilitate locally made Geotextiles replacing imported geotextiles.



## Plasticon Award – Flavoured Milk Bottle

Reliance Industries Limited received prestigious "Plasticon 2012" Gold award in the category "Excellence in Creative Packaging" for the development of PP bottles for packaging of Flavoured milk for AMUL and Shivamrut Dairy. The award was presented to RIL on the inaugural day of Plastindia 2012. Dr. Saroop received the award on behalf of Reliance Industries Limited.





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## International Packaging Products “InterWrap, Weaving a Better World”

International Packaging Products Pvt. Ltd. (IPPL) is a global company from a North America Multinational group InterWrap Inc., whose head quarters is located in Vancouver, British Columbia, Canada.

InterWrap is a vertically integrated, global manufacturer of innovative coated woven products and diverse multi-layer laminated reinforced plastic substrates. InterWrap serves a wide variety of markets such as wood packaging - lumber wrap, industrial packaging, large format outdoor digital print media, converted fabrics, agricultural and construction products. Consistent product quality is achieved by using state-of-the-art plastic extrusion, weaving, coating, laminating, printing techniques and a strong commitment to partnership with our customers, employees, and suppliers.

InterWrap's global supply chain efficiency is achieved by our strategic manufacturing and distribution centers located throughout North America, Asia & Europe. Our research and development of innovative category leading products provide individual customer and market solutions, and our commitment to improvement of existing products and services is a key part of our continued success. InterWrap's global map consists of manufacturing facilities in Canada, USA, China and India with a wide range of distribution centers worldwide

InterWrap is committed to reducing the amount of plastic sent to landfills. To achieve this we have a program in place to collect our clients used packaging or outdoor billboards and recycle them back into existing product lines or new products.

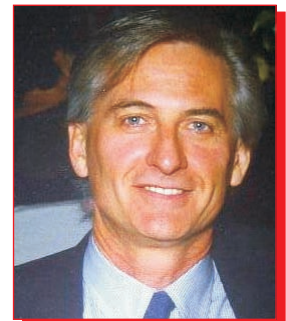
InterWrap's India location, IPPL is a 3 STAR status holder, 100% EOU Company, which has achieved government certifications such as IS 7903:2005 for Tarpaulin, IS 15351:2008 for Pond Lining, IS 15907:2010 for Vermibed, ICC for building contracts and quality achievements such as ISO 9001, ISO 14001.

InterWrap was founded by Mr. Dev Shokar and Mr. Rob Milne who would also like to thank Reliance for their continuous support over the years and their help in developing new types of polymers to help us to continue to grow in India and the rest of the world. Mr. Shokar and Mr. Milne are planning to add a 3rd phase in India which is a result of a hand to hand partnership with Reliance.

*InterWrap® - weaving a better world™*



Mr. Dev Shokar



Mr. Rob Milne



## Kandoi Group

Kandoi Group is engaged in manufacturing of quality PP/HDPE Fabric Bags/FIBC's for varied applications. The group is considered amongst the top five manufacturers/Exporters in India. Besides woven sacks, we are also one of the leading manufacturer of Polyester texturized Yarn & Textile fabric for Garment in India.

The Kandoi's had a modest beginning in the year 1979 with textile manufacturing facility & Woven sacks industries in the year 1985 at Mulund and has taken a big leap forward from 1996 onwards. The promoters chose DAMAN (U.T.) for their growth path and has established till date Six Manufacturing Facilities at Daman. All are state of the art plants with cutting edge technology. Currently the Group is processing in excess of 2500 MT of PP /HDPE per Month which translates to 200 lac linear meter of PP/HDPE Fabric suitable to manufacture small bags and FIBC's.

Sh.Niranjan Agarwal the architect of the group, had the vision and same was shared with his younger brother Sh.Vijay Agarwal, a mechanical Engineer from VJTI Mumbai. Together they have taken the group to the current status. Now their second generation is also coming in the main business stream actively. Kandoi Group products are very well accepted by the core sector industries in the domestic as well as in the export Market.

Sh.Niranjan attributes the success of his group to M/s RIL to large extent. The total requirement of all the polymers are being sourced from M/s RIL and the promoters have high regard for RIL.

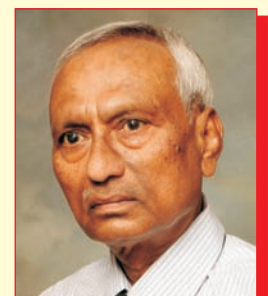
M/s RIL chose Kandoi Group to manufacture PP Fabric/bags for their export requirements in Africa, USA, Europe, Asia etc. through their value added Exports Division. Later on with RIL's Support the group commenced direct export to the European market and added more no. of valued customers.

Sister concerns of Kandoi Group are also recognized as Export house besides all having ISO 9001-2008 Certified companies.

Recently Kandoi Group was awarded The Top Exporters for 2009-10 in Woven sacks/bags, Fabric.



Mr. Vijay Agarwal



Mr. Niranjan Agarwal



## CONFERENCE

### Plastindia 2012

PLASTINDIA 2012 – the 8th International Plastics Exhibition and Conference was held between February 1 and 6, 2012 at Pragati Maidan, New Delhi. This mega event was one of the largest global expositions of the plastic industry that involved more than 1800 exhibitors and over 150,000 business visitors. 40 countries participated in this exhibition.

Reliance Industries Limited, participated in the exhibition and had the largest stall of 1200 Sq. Meters in Hall no 9. The stall was divided strategically in to Customer facilitation Unit and Specific Sectors (Agriculture, Infrastructure, Packaging, Automobile, Healthcare and Lifestyle).

A concurring 2 day conference was organized on 2<sup>nd</sup> & 3<sup>rd</sup> February 2012. It was attended by over 400 delegates from industry, Research Institutes, Government Agencies, regulatory bodies & students.

Dr. Ajit Sapre, Head Reliance Technology Group made a presentation on New Business Opportunities in Material Development; emphasizing on advanced materials like Nano enabled products, extending PE/PP/PET Applications. He also talked about the research on C-Fiber at RIL. Lastly he gave an insight on feedstock flexibility including Bio Feed Stocks.



### ITTA Geotextile Conference

Indian Technical Textiles Association (ITTA) organized its first program “Geotextiles in Roads”. It was a grand success with the attendance of 150 delegates. It was attended by Shri Sujit Gulati, Joint Secretary, Ministry of Textiles, Dr. J. N. Singh, Member (Finance), NHAI, Shri A. B. Joshi, Textile Commissioner, and Ms. Madhavi Das, Director, Ministry of Textiles. The Keynote Address as delivered by Shri P. L. Bongirwar, Advisor, L&T. The Welcome Address was given by Shri Arunchandra N. Jariwala, Chairman, ITTA.

The Inaugural Session was followed by a Technical Session where Reliance Industries showed the video “Application of Geosynthetics in Roads” and was followed by technical presentation from Strata Systems, Techfab (India) Industries, Maccaferri Environmental Solutions India, Garware Wall Ropes Ltd.

Bombay Textiles Research Association (BTRA), Centre of Excellence of Geotech released the first ever compilation of Geotextiles “HANDBOOK OF GEOTEXTILES”.

This Session was followed by a Panel Discussion, which was chaired by the experts in the field viz. Dr. M. K. Talukdar, Kusumgar Corporates Ltd., Dr. S. R. Tambe, consultant, Dr. Anand Katti, Indian Geotechnical Society, Dr. N. V. Nayak, Gammon India, Dr. D. N. Singh, IIT, Mumbai, Ms. Jyotika Nagri, Shri Ambica Polymer Pvt. Ltd. and Shri Piyush Mankad, Skaps Industries Ltd.





## Industry Events (Jan'12 to Mar'12)

We have participated in 10 Industry Events for promotion of various polymer applications. The events organized under the aegis of FICCI, CII, SASMIRA, ITTA & Krishi Vigyan Kendra have led to increase in awareness of Polymers Applications on Leno for Fruit & Vegetable Packaging, FIBC for Sugar and Food Grain storage and Agro textiles for Fruit Cover & Crop Cover; Geotextiles Applications for Roads & Embankments. We have connected to 1500 Stakeholders for intended applications.



## RIL Driven Events (Jan'12 to Mar'12)

In continuation with our effort to promote polymer applications in agriculture, 4 Customer Meets were organized for promotion of PP Non-woven as agro textiles and Leno in Mango, Strawberry & Banana in Gujarat & UP. PP Bottles & PWS for silage were also promoted under the same platform as Dairy industry is also core of agricultural industries. Several Road Shows were also carried out and samples distributed to farmers for their own trials at their farms. We have connected with more than 300 Stakeholders.



## PREFABRICATED VERTICAL DRAINS ( PVD)

Ground improvement with vertical drains has been an accepted practice for improving soft clay deposits and has been widely used over the 60 years. The prefabricated vertical drain is a long flat tube of woven or non-woven geotextile made of polymers like Polypropylene with a core inside .The vertical drains are required to have high permeability and sufficiently high drainage capacity so that pore water escapes in horizontal direction towards the nearest drain. The water then flows freely vertically along the drain to a drainage blanket placed on the soil surface or to a highly permeable layer above or below the clay layer.

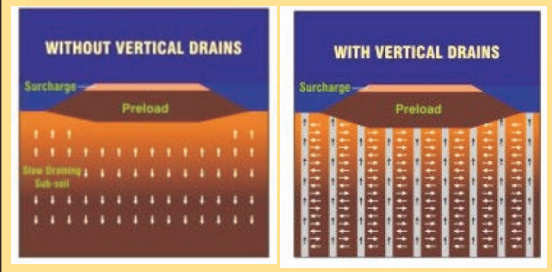
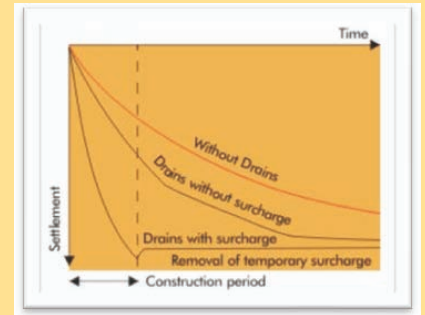
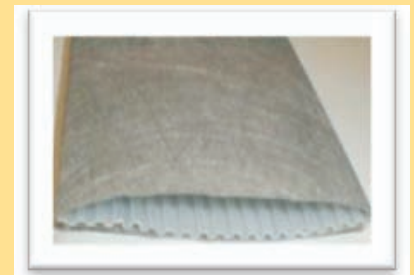
PVDs are generally installed vertically to the depth of 65m and are placed in triangular or square configuration of 1 to 1.5m gap. Under excess hydrostatic pressure the water travel horizontally along the inner core and come out the soil.

### Applications:

- Land reclamation projects
- Ports and harbour construction
- Development of industrial sites.
- Mitigation of liquefaction
- Construction of highways, railways, airfields and dykes.

### Steps of Installation

1. PVD Marking and positioning with RIG
2. PVD being inserted with RIG
3. PVD being cut after suitable length is inserted
4. Installed PVDs





## New Applications



Repol H350FG Non Woven cover for protection from frost



Repol H350FG Seat Covers for Indian Railways



Repol SR20NC and SRM100NC Flavored Milk Bottles



Transparent Containers for water filters made from Repol SRX100



Repol H350FG Non Woven Fruit Cover for Alphonso Mangoes

### EVENT CALENDAR

- Vinyl India, Mumbai, April 12-13, 2012
- AGFO Expo 2012, Ahmedabad, April 20-22, 2012
- Plastpack Ghana 2012, La Accra, Ghana, May 3-5, 2012
- Plastivision Arabia 2012 and ArabiaMold, Sharjah, UAE, May 14-17, 2012
- Agritech Asia 2012, Tel Aviv, May 15-17, 2012
- Middle East Plastic Pipes 2012, Dubai, UAE, May 15-16, 2012
- 6th Bioplastics Markets, Bangkok, Thailand, May 23-24, 2012
- InterMold Vietnam 2012, Hanoi, Vietnam, May 24-26, 2012
- Vietnam Plas Hanoi, Hanoi, Vietnam, June 5-8, 2012



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