



## Medical & Healthcare Plastic Pavilion @ PLASTIVISION INDIA 2020

Venue : L2, Hall 3, Bombay Exhibition Centre, Mumbai, January 16 to 20, 2020

### Program Schedule For Seminar Presentations

Date/Time	Subject & Name of Expert Speaker
Jan 16 THU 3:00 PM to 4:30 PM	<b>Welcome Address and Introduction</b> - <b>Dr. Ashutosh Gor</b> , Chairman, Medical & Healthcare Pavilion
	<b>Evolution of Disposal Medical Devices &amp; Contribution of Plastics</b> - <b>Mr Kishore Khanna</b> , Managing Director, Romsons Group of Companies, Agra
	<b>Material Selection &amp; Processing Of Plastics For Medical Applications</b> - <b>Dr D D Kale</b> , Vice President, Society of Plastic Engineers
Jan 17 FRI 11:30 AM to 1:00 PM	<b>Diversifying into Medical Plastics Disposables Manufacturing? Understand the basics</b> - <b>Mr Anil Choudhary</b> , Director, Operon Strategist, Pune
	<b>Export Opportunities for Medical Plastics Disposables (Focus on Afro-Asean Countries)</b> - <b>Mr. Suhayal Abidi</b> , Editor, Foreign Trade Update, Mumbai
	<b>Manufacturing of Medical Plastics Bags (Urine Bags and More)</b> - <b>Mr. Mehul Kothari</b> , New Vinko Plastics
Jan 17 FRI 3:00 PM to 5:00 PM	<b>Novel S-TPE Solution For I.V. Tubing</b> - <b>Mr. Partha Mohapatra</b> , Lead – Healthcare (India), INEOS Styrolution India Ltd.
	<b>Developments in the Medical Grade Adhesives</b> - <b>Mr. Jayaprakash</b> , Director, SkyValue Global WTC, Bangalore
	<b>“Formulating Life-enhancing solutions for Healthcare Devices”</b> - <b>Mr Suresh V</b> , Market Development – Healthcare Devices – Indian Subcontinent, Covestro India Pvt LTD.
	<b>Medical Device : New Product Development Process</b> - <b>Mr. Harsh Raval</b> , Parisudh Innovations, Vadodara
Jan 18 SAT 11:30 AM to 1:30 PM	<b>Workshop on Biocompatibility Testing of Medical Devices Made from Medical Plastics</b> - <b>Dr. T. S. Kumaravel</b> , Chairman, GLR Laboratories Pvt. Ltd. - <b>Dr. S. S. Murugan</b> , Managing Director, GLR Laboratories Pvt. Ltd. - <b>Dr. N. Parthiban</b> , Assistant Director – QA, GLR Laboratories Pvt. Ltd. - <b>K. R. Navaneethakrishnan</b> , Assistant Director, GLR Laboratories P. Ltd.
	<b>Opportunities in Medical Packaging Sector</b> - <b>Dr R Rangaprasad</b> , Business Head, Packaging 360, Mumbai
	<b>PET Bottle &amp; non-bottle Applications in Pharma &amp; Medical Sectors’</b> - <b>Mr. Rajesh Kumar Gera</b> , AVP Business Development, Reliance Ind. Ltd. - PET Division
	<b>Indian Medical Device Industry - Opportunities and Challenges</b> - <b>Mr. D.L. Pandya</b> , Editor & CEO, Medical Plastic Data Service
Jan 18 SAT 3:00 PM to 5:00 PM	<b>Polymer Modification with Color and Function - Innovative Products for Medical, IVD and Pharma Packaging.</b> - <b>Mr. Umang Shah</b> , National Sales & Marketing Manager - Masterbatch & Compounds for Medical & Pharma Segment, CLARIANT Chemicals India Ltd., Mumbai
	<b>Opportunities In Polymer Based Medical Textiles</b> - <b>Dr Ketan Vadodaria</b> , Associate Senior Faculty, Textile Design Department, National Institute of Design, Ahmedabad
Jan 19 SUN 3:00 PM to 4-30 PM	<b>Healthcare Plastics Waste Recycling : Improves Environment, Economy, Job Creation and Public Health</b> - <b>Mr. D.L. Pandya</b> , Editor & CEO, Medical Plastic Data Service

#### “MEDICAL & HEALTHCARE PLASTICS” Pavilion will include :

**A. Medical & Healthcare Plastic Knowledge Platform : Including Posters, Audio-Visuals, Models, Samples & Publications Highlighting..**

- Why Plastics for Healthcare ?
- Major segments of plastics in medical field i.e. Healthcare, Medicare & Hygiene
- Medical Applications & Important Developments
- Global Trends & Emerging Opportunities with facts & Figures
- Supplier Opportunities

**B. Exhibits By The Technology, Materials, Machinery & Product Suppliers**

**C. Seminars & Interactions with industry experts, Live Demonstration**

#### Medical Care Revolutionized By Plastics

Medical Plastics has transformed several aspects of the healthcare industry. Plastic has proved to be one of the few versatile materials that has been able to adapt along with the dynamic nature of the industry. This shows the importance of Plastic Materials.

More and more developments by Medical Polymer Companies made available to the Indian Industry has created not only growth opportunities but opportunity to move up the value chain by offering high end critical care products.

**PLASTIVISION INDIA**, an event organized by **All India Plastics Manufacturers Association (AIPMA)** will include of a “**MEDICAL & HEALTHCARE PLASTICS**” Pavilion under the Chairmanship of **Dr Ashutosh Gor** and which will be co-ordinated by “**Medical Plastics Data Service**”. Our mission is to create Inter Sectorial coordination between Indian Polymer / Plastics Sector and Indian Medical Device Industry Sector for the broader objective to support make-in-India mission.

This will not only be a unique opportunity to the existing Companies looking for Developments / Diversifications, but also for the Non-Medical Plastics based units to branch out to Medical Plastics Products.

**Medical & Healthcare Plastics Pavilion**

**28 YEARS OF TRUST**

**PLASTIVISION**  
GATEWAY TO BUSINESS GROWTH  
16-20 JAN 2020 | MUMBAI  
BOMBAY EXHIBITION CENTRE, GOREGAON

Organiser:  Approved by:  Endorsed & Supported by:  Supported by:  

**The All India Plastics Manufacturers Association**  
AIPMA House, A-52, Street No. 1, MIDC, Marol, Andheri (E), Mumbai-93, India  
T : +91 22 6777 8899 / 841 / 847 / 851 F : +91 22 2825 2295  
E : sales@plastivision.org, info@plastivision.org W : www.plastivision.org

Concepts & Contents by :  
**MEDICAL PLASTICS DATA SERVICE**  
www.medicalplasticsindia.com

## SEMINAR ON MEDICAL PLASTICS SECTOR ABSTRACTS OF PRESENTATIONS BY EXPERT SPEAKERS

**January 16, 2020 : 3:00 PM**

**Title : Material Selection & Processing Of Plastics For Medical Applications**

**By : Dr. D. D. Kale** (Ex Professor of Polymer Technology, UDCT, Mumbai, and Ex Vice President SPE, India)

The importance of Medical devices in India is increasing every year and hence need special attention. The commodity plastics like polyethylene and Polypropylene as well as specialty polymers and compounds are used for manufacturing of medical devices. However, the compounding and processing of base polymers require some precautions. The additives are selected carefully and so also finishing. The reprocessing of medical devices is not the same as routine reprocessing. The composition of body fluids is not the same throughout the body. The implants have different requirements and standards depending upon the time necessary for the implants. Some of the devices are made from bio degradable polymers. The processing of biopolymers is different. Some aspects of selection, processing and reprocessing are briefly discussed.

**January 17, 2020: 11:30 AM**

**Title : Diversifying into Medical Plastics Disposables Manufacturing? Understand the basics**

**By : Mr Anil Choudhary**, Director, Operon Strategist, Pune

The Setting up the medical devices manufacturing unit is a Multi-skilled activity and organisation has to be very cautious about all the elements while designing of facility, Selecting the equipment, Setting up the requisite qualified manpower, Regulatory aspects, long term goals about expansion etc while setting up the unit. The presentations touch base with the basic consideration while setting up the unit.

**January 17, 2020 : 11:30 AM**

**Title : Export Opportunities for Medical Plastics Disposables (Focus on Afro-Asean Countries)**

**By : Mr. S. Abidi**, Research Advisor, GOG-AMA Centre of International Trade & Editor, Foreign Trade Update.

Medical Plastics Disposable sector is a sunrise value-added sector in India, especially in Gujarat and has high growth potential globally, especially in Africa and Asean countries. Disposable medical supplies consist of medical apparatuses, devices, or consumables that are intended for one time or temporary use in medical settings. These supplies are an essential component in hospital settings, as they save time and reduce healthcare-associated costs. Few examples of plastics disposables medical supplies include drug tests disposables, exam gowns, face masks, gloves, suction catheters, surgical sponges, hypodermic needles, syringes, and applicators among others. These are used in applications such as dialysis consumables, radiology consumables, infusion products, intubation & ventilation supplies, hypodermic

products, sterilization consumables, nonwoven medical supplies etc. The disposable medical supplies market covers most medico-surgical specialities such as cardiovascular, cerebrovascular, ophthalmology, gynecology, urology, orthopedics, and others. For example, cardiovascular segment accounted for the majority of the market share, i.e., two-ninths share of the total market in 2016, owing to the rise in cardiovascular diseases globally. For instance, according to the World Health Organization, an estimated 17.7 million people died from CVDs (cardiovascular diseases) in 2015, which represents 31% of total global deaths.

African and Asean nations due to their rising per capita GDP, growing migration of population to urban areas, rising diseases such as cardiovascular, diabetes etc. rising private medical healthcare facilities and health insurance are all contributing to the growth of medical plastic disposables and present a lucrative market for Indian manufacturers and merchant exporters.

This talk will provide an overview of the Afro-Asean market to enable exporters to take informed decisions and take a significant market share.

**January 17, 2020 : 3:00 PM**

**Title : Novel S-TPE solution for IV tubing**

**By : Mr. Partha Mohapatra**, Lead – Healthcare (India), INEOS Styrolution India Ltd.

INEOS Styrolution has newly developed S-TPE (Styrene Thermoplastic Elastomer), called "Styroflex 4G80", for IV tubing application. The key advantages of this material are, less drug absorption due to its plasticizer-free composition, excellent bonding performance with other IV components, good kink resistance and clarity. Styroflex 4G80 can be processed on standard tubing extrusion equipment at superior processing rates when compared to other materials. Styroflex 4G80 has been developed through collaborations with global OEM's and would be an attractive alternative material for next generation IV system. Styroflex 4G80 is available with INEOS Styrolution 's medical grade package which includes up to 12 months notification of change (NOC), locked formulations as defined in a Drug Master File (DMF), and a variety of regulatory compliance documents and biocompatibility information (e.g. USP Class VI, ISO 10993).

**January 17, 2020 : 3:00 PM**

**Title : Formulating Life-enhancing solutions for Healthcare Devices**

**By : Mr. Suresh V.**, Market Development – Healthcare Devices – Indian Sub-continent, Covestro India Pvt. Ltd., Mumbai

Covestro has a practiced heritage and demonstrated track record of developing bold solutions that help bring innovative medical and healthcare applications to life- from "Concept to Mass

production". With our combination of technically advanced materials and deep expertise, we help OEMs meet the critical design, manufacturing and end-use performance parameters of a variety of medical devices and packaging applications.

Formulating the life-enhancing Solutions; in the presentations we will be talking about the global trends in the healthcare industries that are common to India and solutions from Covestro that can support the Indian medical device manufacturers to accelerate the localization.

Suresh V, Market development – Health Devices for Covestro India, is 15 + years of experience in marketing various engineering plastics and in his 9 years of endeavor with Covestro he has been deeply working in developing the Indian Medical devices market.

**January 17, 2020 : 3:00 PM**

**Title : Medical Device : New Product Development Process Right from conceptualization to manufacturing – Complete process will be discussed.**

**By : Mr. Harsh Raval**, Parisudh Innovations, Vadodara

Phase I : Research & Pre development Survey  
Phase II : Project Detailing  
Phase III : Conceptualization  
Phase IV : Product Detail Engineering  
Phase V : Design Validation – Virtual Simulation (FEA)  
Phase VI : Design Verification – 3D Printing / Prototyping  
Phase VII : Packaging Design

**January 18, 2020 : 11:30 AM**

**Title : Approaches to Biocompatibility Testing of Medical Devices made from Medical Plastics**

**By : Dr. T. S. Kumaravel**, Chairman, GLR Laboratories Pvt. Ltd.,  
**Dr. S. S. Murugan**, Managing Director, GLR Laboratories Pvt. Ltd.,  
**Dr. N. Parthiban**, Assistant Director – QA, GLR Laboratories Pvt. Ltd.,  
**K. R. Navaneethakrishnan**, Assistant Director, GLR Laboratories Pvt. Ltd.

These polymers are widely used in several medical devices, either individually or in combinations with other materials. Moreover, these materials have certain chemical footprints, that make them unique in terms of biocompatibility. We will discuss these in light of recent developments in ISO 10993 and the US FDA guidance. For the benefit of the manufacturers, we will discuss the device classifications, how to review critical sections of biocompatibility reports, and quality requirements of biocompatibility studies.

**January 18, 2020 : 3:00 PM**

**Title : Opportunities in Medical Device Packaging**

**By : Dr. R. Rangaprasad**, Business Head, Packaging360, Mumbai, India [www.packaging360.in](http://www.packaging360.in)

India's medical devices market is the fourth largest in Asia — after Japan, China and South Korea — at over \$10 billion and is projected to grow to \$50 billion by 2025. Currently, India has 750-800 medical device manufacturers, with an average investment of Rs 170-200 million and an average turnover of Rs 450-500 million.

The Medical device packaging industry is therefore, presented with a glorious opportunity for design innovations & deliver world class solutions, both for domestic & overseas markets.

This paper covers the following areas of this fascinating domain.

- Fundamentals of Medical Device Packaging
- Design of Medical Device Packaging
- Standards & Regulations

- Package Testing & Validation
- Innovations in medical device packaging
- Challenges in Medical Device Packaging
- Opportunities in India

**January 18, 2020 : 3:00 PM**

**Title : PET Bottle & Non-bottle Applications in Pharma & Medical Sectors**

**By : Mr. Rajesh Kumar Gera** - AVP Business Development, Reliance Industries Limited - PET Division

PET Bottles are used in Pharma sector for more than two decades in India. They are primarily used for the OTC products incl. antacids, cough syrups, vitamins, etc and for select capsules. PET bottles have replaced conventional packaging materials in Pharma sector due to its inherent advantages coupled with cost-competitiveness. The PET packaging for Pharma products in India/abroad include 'Bottles & Jars' and the non-bottle applications include: "Blood Collection Tubes (BCT) and thermoformed APET sheet products and blisters" among other items.

The physicals and cost-advantages of this packaging material has now also extended to 'PET Injection Moulded Products'; which can have potential applications in Pharma and medical sectors. It has also proved to be a 'Greener Packaging' option for Pharma & medical sectors (both PET and APET items). The PET bottles are one of the most recycled products globally incl. India and the recycled PET bottles & thermoformed APET items are used to make fibres/straps.

**January 18, 2020 : 3:00 PM**

**Title : Indian Medical Devices Industry – Opportunities and Challenges**

**By : Mr. D.L. Pandya**, Editor & CEO, Medical Plastic Data Service & [www.medisourceasia.com](http://www.medisourceasia.com)

Introducing Medical Devices - Classifications & Examples, Global Life Science & Medical Device Industry, Types of Companies Into, Manufacturing & Marketing of Medical Devices, Healthcare Market In India, Indian Medical Device Industry & Markets, Important Features of Indian Medical Devices Market, Medical Device Regulations in India, Future Trends & Opportunities : Global, Future Trends & Opportunities : India, Product Development Process For Medical Devices, Healthtech Startups In India, AGNI: An Innovation Facilitation Program/Other Sources of Technology, National Medical Devices Promotion Council & Other Initiatives, Strategy to Enter Indian Medical Device Market, Important Features of Medical Supply Chain In India, Risks For Entrepreneurial Ventures & Quality of Successful Entrepreneurs.

**January 18, 2020 : 3:00 PM**

**Title : "Polymer Modification with Color and Function - Innovative Products for Medical, IVD and Pharma Packaging."**

**By : Mr. Umang Shah**: National Sales & Marketing Manager – Masterbatch & Compounds for Medical & Pharma Segment, CLARIANT Chemicals India Ltd, Mumbai

1. Healthcare Products & Process for new developments.
2. What is Important/ Interesting for Customers ?
3. PROTECTION of healthcare products:- end to end solutions from API to patient.
4. Focus on Regulatory changes: USP 661.1, ICH Q3D
5. Clariant at a glance. Why CLARIANT ?

**Jan 19, 2020 : 3:00 PM**

**Title : Opportunities in polymeric based medical textiles**

**By : Dr. Ketan Vadodaria**, Associate Senior Faculty, Textile

Design Department, National Institute of Design, Ahmedabad

Medical textiles is an emerging field in technical textiles. Still, many medical textile products are imported and not manufactured in India due to many reasons such as lack of knowledge. Globally, the Medical textile field has expanded into the multi-billion-dollar industry. With the growth of the healthcare sector and the aging population, the demand for medical textiles is increasing in India. Medical textiles are the combination of materials and textile structures used in our day to day life to infection control and lifesaving advanced needs in hospitals. Medical textile products are ranging from wipe adult/incontinence/baby diapers, sanitary napkins to implantable and from artificial organs to mobile and off-site health monitoring systems on apparels to infection control products such as surgical gowns, facemasks, hospital pillows, and bedsheets. Hernia mesh, vascular grafts, tendons, ligaments are few of the more advanced

medical textile structures. The list is long. In order to make medical textiles, different polymers and biopolymers are used. The lecture focuses on opportunities, challenges in polymeric based medical textiles.

**January 19, 2020 : 3:00 PM**

**Title : Healthcare Plastics Waste Recycling : Improves Environment , Economy, Job Creation and Public Health**

**By : Mr. D.L. Pandya**, Editor & CEO, Medical Plastic Data Service & [www.medisourceasia.com](http://www.medisourceasia.com)

About Healthcare Waste and its impact, Circular Economy, Waste Management in Healthcare, Plastics : Significant Share., Common Recyclable Plastics : Products and Materials Used, PVC : A Material with High Recycling Potential, International Bench Mark Activities, Economic, Social and Environmental Value of Recycling Recyclability of Healthcare Plastics.