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Polymers and Plastics Technology Handbook

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About the Book

Plastics play a very important role in our daily lives. Throughout the world the demand for plastic, particularly plastic packaging, continues to rapidly grow. Polymer technology deals with the manufacture and production of polymer and synthetic substances. Plastic is incredibly versatile and can be made from different ingredients, moulded into any shape, and put to a huge range of uses across industry and the rest of society, from carrier bags to electrical cables. Polymer energy system is an award winning, innovative, proprietary process to convert waste plastics into renewable energy. Some of the important example of polymers and plastics are polytetra fluoroethylene (PTFE), polyether sulphone (PES), phenol-formaldehyde (PF), polyolefins, vinyl polymers, thermoplastic polyesters, polysulfones, poly(phenylene sulfide), etc. Polymers are the most rapidly growing sector of the materials industry. The Indian plastic industry has taken great strides. In the last few decades, the industry has grown to the status of a leading sector in the country with a sizable base. The material is gaining notable importance in different spheres of activity and the per capita consumption is increasing at a fast pace. Continuous advancements and developments in polymer technology, processing machineries, expertise, and cost effective manufacturing is fast replacing the typical materials in different segments with plastics. On the basis of value added, Indian share of plastic products industry is about 0.5% of national GDP.
The major contents of the book are properties and applications of speciality plastics, thermoset plastics, applications of recycle plastics, introduction of polymer science, polymer additives, blends and composites, commodity thermoplastics and fibres etc. This book also consists of raw material suppliers for plastic and plastic products, manufacturers of plastic, processing machinery, plastics processing machinery and equipment (foreign), machinery and equipment for plastic converting, extruders and extrusion lines, injection moulding machines, presses and accessories, blow moulding and thermoforming machines etc.
The book has been designed with the idea of blending and integrating basic polymer science and the technology of plastics into a composite structure. This book is an outcome of an endeavour in the direction of polymer and plastic processing. It would be of immense use to entrepreneurs, consultants, students and libraries etc.

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