

# Modern Technology of Pulp, Paper and Paper Conversion Industries

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**Format:** Paperback

**ISBN:** 817833044X

**Code:** NI104

**Pages:** 568

**Price:** Rs. 1,000.00 US\$ 26.95

**Publisher:** Asia Pacific Business Press Inc.

Usually ships within 5 days

The paper conversion sectors are assuming increasingly important place in the life of every nation. Conversion technology is being evolved continuously for having better conversion, handling, transportation, preservation and usage of materials. Paper and Pulp industry plays a vital role towards conversion. Pulping is a process of delignification removing lignin from wood while leaving cellulose fibres intact. Pulp and paper can be produced from many resources like; Eta Reed, bamboo, bagasse, elephant grass, etc. Growing population and increased demand of paper products has created raw material shortage all over the world especially in developing countries. Consequently agricultural residues and farm wastes are the only hope for further pulp papermaking in these countries. However, technology is evolving that holds promise for using waste or recycled paper and, in some cases, even plastics to make an array of high performance composite products that are in themselves potentially recyclable. Pulp and paper industry is one of the largest industries in India today, which consumes huge quantity of water. As the product does not contain any water most of the water used in the process reappears as waste. Therefore the waste water is used in crop irrigation which will solve both problems i.e. industrial waste solution and irrigation. The Indian paper industry has close linkages with economic growth as higher industrial output leads to increased demand for industrial paper for packaging, increased marketing spend benefits the newsprint and value added segments, and increased education and office activities increase demand for writing and printing paper. It is estimated that there is an economic growth of 8.5% for India which will benefit the demand for paper.

The major contents of the book are dry process hard boards from recycled newsprint paper fibres, abrasive kraft base paper from sun hemp (*crotolaria jauncia*), production of soda semi chemical pulp from *sesbania sesban* (linn.) merr., high yield pulps from eta reed, the influence of clay addition on flotation deinking, alternative uses for waste/paper in wood based composite products, deinking of flexo graphic newsprint: use of ultra filtration to close the water loop etc. This book also consists of alkaline pulping chemistry, manufacturers, suppliers of plant & machinery and allied products, manufacturers and suppliers of raw materials, imported pulp manufacturers & suppliers imported pulp, Indian agents for imported pulp etc. In view of the close linkage between paper and conversion industry we have tried to come out with this unique book containing relevant and useful information in both these industries. We have tried to make it most exhaustive first giving details, then presenting and dividing in different chapter to understand better. Thus we have tried to fill the vacuum that existed fill now. This book will be useful for paper chemists as well as conversion industries.

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Wed, 13 Mar 2024 16:20:02 +0530