



# Environmentally Benign Approaches for Pulp Bleaching, Second Edition

By Pratima Bajpai

Download now

Read Online 

**Environmentally Benign Approaches for Pulp Bleaching, Second Edition** By Pratima Bajpai

Pulp and paper production has increased globally and will continue to increase in the near future. Approximately 155 million tons of wood pulp is produced worldwide and about 260 million is projected for 2010. To cope with the increasing demand, an increase in production and improved environmental performance is needed as the industry is under constant pressure to reduce environmental emissions to air and water. This book gives updated information on environmentally benign approaches for pulp bleaching, which can help solve the problems associated with conventional bleaching technologies.

- Main focus is on the environmentally-friendly technologies that can help solve some of the problems associated with conventional bleaching technologies
- Information given is up-to-date, authoritative, and cites the experiences of many mills and pertinent research, which is of interest to those working in the industry or intending to do so
- Covers in great depth all the aspects of various bleaching processes including environmental issues

 [Download Environmentally Benign Approaches for Pulp Bleachi ...pdf](#)

 [Read Online Environmentally Benign Approaches for Pulp Bleac ...pdf](#)

# Environmentally Benign Approaches for Pulp Bleaching, Second Edition

By Pratima Bajpai

## Environmentally Benign Approaches for Pulp Bleaching, Second Edition By Pratima Bajpai

Pulp and paper production has increased globally and will continue to increase in the near future. Approximately 155 million tons of wood pulp is produced worldwide and about 260 million is projected for 2010. To cope with the increasing demand, an increase in production and improved environmental performance is needed as the industry is under constant pressure to reduce environmental emissions to air and water. This book gives updated information on environmentally benign approaches for pulp bleaching, which can help solve the problems associated with conventional bleaching technologies.

- Main focus is on the environmentally-friendly technologies that can help solve some of the problems associated with conventional bleaching technologies
- Information given is up-to-date, authoritative, and cites the experiences of many mills and pertinent research, which is of interest to those working in the industry or intending to do so
- Covers in great depth all the aspects of various bleaching processes including environmental issues

## Environmentally Benign Approaches for Pulp Bleaching, Second Edition By Pratima Bajpai Bibliography

- Sales Rank: #7966773 in Books
- Brand: Brand: Elsevier Science
- Published on: 2012-06-13
- Original language: English
- Number of items: 1
- Dimensions: 9.25" h x 7.50" w x .75" l, 2.30 pounds
- Binding: Hardcover
- 416 pages

 [Download Environmentally Benign Approaches for Pulp Bleachi ...pdf](#)

 [Read Online Environmentally Benign Approaches for Pulp Bleac ...pdf](#)

## Download and Read Free Online Environmentally Benign Approaches for Pulp Bleaching, Second Edition By Pratima Bajpai

---

### Editorial Review

#### Review

*"Bajpai provides a second edition of his comprehensive book on environmentally benign methods for pulp bleaching and related new and emerging technologies...The book includes extensive end-of-chapter references and a list of abbreviations. While technical, it is clearly written."--Reference and Research Book News, August 2013*

#### From the Back Cover

Pulp and paper production continues to increase globally, now totalling some 380 million tonnes. Growth is the most rapid in Asia, due mainly to the rapid expansion of industry in China. Asia accounts for well over a third of total world paper and paperboard production. In North America, by contrast, production is contracting. Asia accounts for almost 40% of global consumption, while the EU and North America account for about 25% each.

The industry is very capital-intensive with small profit margins, which tends to limit experimentation, development, and incorporation of new technologies into the mills. Improved environmental performance is needed as the industry is also under constant pressure to reduce environmental emissions to air and water. During the past decade, no segment of the pulping and papermaking process has received as much attention as the bleach plant. In the mid-1980s it was discovered that US chemical pulp mills using elemental chlorine and/or sodium hypochlorite as their primary bleaching agent were discharging unusually high levels of carcinogenic dioxins and furans in their effluent streams. The industry undertook a very rapid process about-face. The pace increased when further studies definitively tied the presence of these carcinogens to the use of elemental chlorine. As a result most of the bleached chemical pulp mills around the world rapidly instituted process changes away from elemental chlorine and towards combinations of chlorine dioxide, oxygen, hydrogen peroxide, ozone, peroxy acids and enzyme technologies. The focus of attention in bleaching research continues to be on the development of alternatives to chlorine-containing compounds. Most efforts have centered on the oxygen families of chemicals. Metals management development is aimed at increasing the effectiveness or selectivity of expensive chemicals.

The continuing pressure to further reduce air and water emissions is driving the development of technology to capture all mills effluents and return them to the process. Controlling the concentration and build-up of impurities in the liquor cycle is of paramount importance as more bleach plant effluents are collected for evaporation and burning. This book examines environmentally benign approaches for pulp bleaching and explores new and emerging bleaching technologies that are moving the industry towards effluent closure. \* Covers environmentally friendly technologies that can help solve some of the problems associated with conventional bleaching technologies. \* Information is up-to-date, authoritative and based on practical experience and pertinent research \* In depth coverage of various bleaching processes, including environmental issues.

#### About the Author

Dr. Pratima Bajpai is currently working as a Consultant in the field of Paper and Pulp. She has a vast 36 years of experience in this field. She has worked at National Sugar Institute Kanpur (India), University of

Saskatchewan (Canada), University of Western Ontario (Canada), and Thapar Center for Industrial Research and Development (India). Dr. Bajpai's main areas of expertise are industrial biotechnology, pulp and paper, and environmental biotechnology. She has contributed immensely to the field of industrial biotechnology and is a recognized expert in the field. Dr. Bajpai has written several advanced level technical books on environmental and biotechnological aspects of pulp and paper which have been published by leading publishers in the USA and Europe. She has also contributed chapters to a number of books and encyclopedia, obtained 11 patents, written several technical reports, and has implemented several processes in Indian Paper mills. Dr. Bajpai is an active member of the American Society of Microbiologists and is a reviewer of many international research journals. She has also handled several Sponsored Research Projects from industry and government agencies. She is an active member of the New York Academy of Science, American Society for Microbiology, and many more.

## **Users Review**

### **From reader reviews:**

#### **Edward Robinette:**

Now a day folks who Living in the era wherever everything reachable by connect with the internet and the resources inside can be true or not involve people to be aware of each details they get. How a lot more to be smart in getting any information nowadays? Of course the reply is reading a book. Studying a book can help folks out of this uncertainty Information specifically this Environmentally Benign Approaches for Pulp Bleaching, Second Edition book as this book offers you rich information and knowledge. Of course the knowledge in this book hundred % guarantees there is no doubt in it everbody knows.

#### **Kimberly Hopkins:**

Hey guys, do you wishes to finds a new book to study? May be the book with the name Environmentally Benign Approaches for Pulp Bleaching, Second Edition suitable to you? Often the book was written by well-known writer in this era. The particular book untitled Environmentally Benign Approaches for Pulp Bleaching, Second Edition is the one of several books that will everyone read now. This kind of book was inspired many men and women in the world. When you read this guide you will enter the new dimension that you ever know previous to. The author explained their strategy in the simple way, thus all of people can easily to comprehend the core of this book. This book will give you a lot of information about this world now. In order to see the represented of the world on this book.

#### **Samuel Hamby:**

The guide untitled Environmentally Benign Approaches for Pulp Bleaching, Second Edition is the book that recommended to you to study. You can see the quality of the guide content that will be shown to anyone. The language that publisher use to explained their ideas are easily to understand. The writer was did a lot of research when write the book, therefore the information that they share to you is absolutely accurate. You also could possibly get the e-book of Environmentally Benign Approaches for Pulp Bleaching, Second Edition from the publisher to make you considerably more enjoy free time.

**Jose Banks:**

That publication can make you to feel relax. This specific book Environmentally Benign Approaches for Pulp Bleaching, Second Edition was bright colored and of course has pictures on the website. As we know that book Environmentally Benign Approaches for Pulp Bleaching, Second Edition has many kinds or type. Start from kids until teenagers. For example Naruto or Private investigator Conan you can read and believe you are the character on there. Therefore not at all of book tend to be make you bored, any it makes you feel happy, fun and unwind. Try to choose the best book for you personally and try to like reading which.

**Download and Read Online Environmentally Benign Approaches  
for Pulp Bleaching, Second Edition By Pratima Bajpai  
#5C3LOVWRGYF**

## **Read Environmentally Benign Approaches for Pulp Bleaching, Second Edition By Pratima Bajpai for online ebook**

Environmentally Benign Approaches for Pulp Bleaching, Second Edition By Pratima Bajpai Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Environmentally Benign Approaches for Pulp Bleaching, Second Edition By Pratima Bajpai books to read online.

### **Online Environmentally Benign Approaches for Pulp Bleaching, Second Edition By Pratima Bajpai ebook PDF download**

#### **Environmentally Benign Approaches for Pulp Bleaching, Second Edition By Pratima Bajpai Doc**

Environmentally Benign Approaches for Pulp Bleaching, Second Edition By Pratima Bajpai Mobipocket

Environmentally Benign Approaches for Pulp Bleaching, Second Edition By Pratima Bajpai EPub

5C3LOVWRGYF: Environmentally Benign Approaches for Pulp Bleaching, Second Edition By Pratima Bajpai