zcannot imagine even one ordinary day without a piece of paper. It has become a constant attribute of human life.

The volume "Handbook of Paper and Board" is a cross-sectional, but still profound, analysis of paper history, technology, manufacture, structure and economic aspects of paper and board. Paper structure is based on fibrous raw materials, which may be primary fibres (wood, annual non-wood plants) or secondary fibres (which are produced from recovered paper) (Chapter 2). Plenty of chemical additives such as starch, dyes, brightening and whitening agents, chelators and complexion compounds are used in the manufacture of paper (Chapter 3). Moreover, stock preparation and water role in production are some of the preliminary steps (Chapters 4, 5).

There are different types of paper, therefore miscellaneous changes may be rendered to the manufacturing process to achieve the final desirable effect of paper quality. However, some general sections while manufacturing process are preserved. These are: the flow system, the headbox and the wire section, the press section, the drying, the size press, the coating section, the calender and pope reeler (Chapter 6). Coating of paper and board is the following step of production (Chapter 7) and the finishing process ends the production (Chapter 8). Additional aspects, such as controlling of machines, paper and board testing or book preservation, which are present during these processes are also included in this book (Chapters 9, 12, 13). Separate attention is given to the grades and properties of paper and board (Chapter 11).

This book is constructed in very readable way. There are a lot of figures and schemes, which simplify the understanding of entire processes. Therefore, this handbook may be exploited not only by specialists and manufacturers of paper and board, but also may be an interesting guide for non-specialists, which look into it just for pure curiosity.

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Da-Wen Sun (Ed.), Emerging technologies for food processing, Elsevier Academic Press, San Diego, CA, USA, 2005 (xvii+771 pp., £100.00, ISBN: 0-12-676757-2)

Food producers want to be able to store food from the time of plenty to the time of need and to be able to transport food over long distances without any detrimental effects on food quality. The continuous emergence of newly developed food processing technologies facilitates such requirements by making the food industry more diverse, competitive and efficient. *Emerging Technologies for Food Processing* provides in depth information on advanced processing technologies.

This volume contains 28 chapters and is divided into 6 parts. The first 3 parts focus on the latest non-thermal food processing methods. Part 1 contains 3 chapters that detail high pressure processing techniques, whilst part 2 is composed of 5 chapters on pulsed electric field techniques. Part 3 consists of 7 chapters that cover other non-thermal processing techniques, such as osmotic dehydration, ultrasound, irradiation, radio frequency electric fields, pulsed light, and athermal membranes. Part 4 contains 6 chapters that provide detailed information about alternative thermal processing techniques such as microwave heating, radio frequency processing, ohmic heating, combined microwave vacuum drying, new hybrid drying and thermal monitoring utilising NMR technology. The penultimate part is composed of 4 chapters, which discuss the latest developments in food refrigeration. The final part consists of 3 chapters that focus on minimal processing of vegetables, fruits, juices, ready meals and modified atmosphere packaging.

This book provides a comprehensive overview of innovations in food processing, with particular focus upon topics that are vital to the food industry today, and pinpointing the trends in future research and development. In conclusion, *Emerging Technologies for Food Processing* is highly recommended for students, researchers, food engineers and technologists with specific interests in many areas of food science and technology.

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