is also provided. The final chapter discusses how the replacement of dangerous and/or toxic chemicals in various industrial processes, such as the demise of acetaldehyde, has led not only to improved safety, but also to greater profit. A summary and study guide problems are provided at the end of each chapter, and a list of specialised books for further study and reference follows the final chapter.

This interesting volume provides a practical perspective and information on the historical development of both industrial and theoretical ideas, permitting an understanding of how industrial problems have been solved and how organic chemistry principles played a role. It is ideal for anyone learning or working in areas of organic chemistry, chemical engineering, particularly the petrochemical and polymer chemistry fields.

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Available online 24 July 2006

doi:10.1016/j.carbpol.2006.05.015

Medical Textiles and Biomaterials for Healthcare, S.C. Anand, J.F. Kennedy, M. Miraftab, S. Rajendran (Eds.). Woodhead, Cambridge (2006). xi + 508 pp., £150-00, ISBN: 1-85573-683-7

Medical textiles is a major growth area within the technical textiles industry and its range of applications continues to grow and increase in diversity with every new development. Medical textiles are utilised everyday in almost all healthcare environment activities, in the form of plasters, bandages, pressure garments, etc. This detailed volume is divided into eight parts, each of which begins with a comprehensive overview of the subject area, followed by selected papers from the MEDTEX conference, hosted by The University of Bolton.

The initial part of *Medical Textiles and Biomaterials for Healthcare* is composed of seven chapters on biomaterials utilised in medical textiles. The introductory overview provides information on the classification of natural and manmade textile fibres, natural and modified carbohydrate polymers and proteins used in medical textiles, and commercial applications and products using carbohydrate polymers. Specific topics covered in this part of the volume include new resorbable biomaterials, reformed collagen fibres, chitosan-alginate fibres, and biodegradable polylactides. The second part of the volume focuses upon healthcare and hygiene products. This is an important issue for the World Health Organisation because if healthcare units are not hygienic, then patients are at risk of becoming unwell and getting infections. This part includes chapters on nonwoven applications, advanced textiles, wool and blended fabrics for the elderly, and ultrasonic cotton bleaching. The third part covers infection control and barrier materials, and includes ten chapters on what can be done to control infections if needed and the materials that will help to protect patients from getting infections, providing information on topics such as antimicrobial and antibacterial materials, biocidal textiles, breathable nonwovens, etc.

The fourth and fifth parts each contain seven chapters, which deal with bandaging and pressure garments, and woundcare materials, respectively. The treatment of venous leg ulcers is an important topic, which is covered in several chapters in part four, whilst part five deals with topics such as burns treatment, chitin-based dressings and drug release. The sixth part contains six chapters on implantable devices, providing information on interesting topics such as 3-dimensional tissue engineering textile architectures, and spider-silk supportive matrix. The penultimate part focuses on medical devices, containing ten chapters that include bi-directional surgical sutures, natural silk-based surgical threads, vascular prostheses, and nerve implants. The final part is about intelligent textiles for medical applications. This shorter, but equally important section, is composed of four chapters that discuss cell therapy delivery, textile finishing, and polymer surface gas plasma treatment.

This volume provides a comprehensive overview of the main aspects of the medical textiles area as applied to the healthcare sector, and provides the reader with detailed insight into some of the specific areas of investigation that are currently being developed to improve the quality of life and comfort of patients. It is therefore highly recommended to all individuals with academic, industrial and research interests in medical textiles.

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Available online 7 September 2006

doi:10.1016/j.carbpol.2006.05.016

Carbohydrates: Fundamentals and Applications, S.P. Gimelli. Micelle Press, Weymouth, Dorset (2006). x + 207 pp., £59-00, ISBN: 1-870228-29-4

Carbohydrates are an essential part of human existence, and come as mono- (single), oligo- (several), and poly- (many) saccharides. The disaccharide sucrose (household 'sugar') has been known and utilised for thousands of years, and was produced in Europe in refineries as early