

renewable biomass as its primary source of energy and material needs. However, only a very little amount of the renewable resources are utilized for the production of chemicals. The relationship between the current use of renewable resources for the production of chemicals as well as the production of energy, food, lumber and paper products, points to the great potential of purpose biomass-to-chemicals cultivation programs. It is necessary to have a knowledge of the current sources and current industrial uses of biomass to get a better yield of the renewable resources.

Industrial Utilization of Renewable Resources. An Introduction aims to give an overview of the current sources and current industrial uses of biomass to stimulate future initiatives that will bring a greater industrial role of biomass in the world. The book is recommended for anyone interested in the field and clearly it revolves around carbohydrate polymers such as cellulose and starch.

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Water and Food Quality. Edited by Thelma M. Hardman, Elsevier Science Publishers Ltd., Barking, 1989. pp. xii + 370, price £53.00/US\$95.50, ISBN 1 85166 306 1

The control of the moisture content of foodstuffs and the factors affecting equilibration and mobility of water are of great concern to the food scientist and

technologist. The earliest civilisations discovered empirically that a direct relationship often existed between the amount of water in a food and its relative tendency to spoil. Thus, many foods were preserved by sun-drying and salting. Modern quality control techniques include the prevention of moisture exchange and the controlled removal of water, in order to extend the storage life of food products. Chemical changes and microbial growth increase with moisture content.

As the factors that determine water activity have become better understood, so new food products have been developed; and the attainment of food stability by controlling water activity is increasingly being pursued. *Water and Food Quality* aims to describe the effects of water on food quality with regard to the static and dynamic aspects of water activity and how it affects the purely aesthetic aspects of food presentation, the nutritional quality and microbial growth; the interactions between proteins and water; the control of emulsion stability, gel structure and food texture; as well as the effects of water in the eating quality of meat during its mechanical processing and freezing; the quality of confectionery products; and the stability of vitamins. *Water and Food Quality* also includes an extensive bibliography at the end of each chapter, which will enable the reader to explore each particular area in greater detail. The book is a good source of information for scientists and technologists concerned with preservation and quality of food.

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