ABSTRACT

Starch is one of the major polysaccharides employed as biopolymers by the food industry, and its wide range of applications has resulted in intense research of starch structure and technology. Written by an outstanding multidisciplinary team with complementary expertise in both academia and industry, Starches: Characterization, Properties, and Applications takes an innovative approach to the trends of starch production.

The book provides an up-to-date overview of starch applications in the food, textiles, pharmaceuticals, chemical, agricultural, and plastic industries when used as a substitute for synthetic polymers. Starch nanocomposites properties and starch-based blends biodegradability are also discussed. The book covers the recent advances made in starch characterization using techniques such as atomic force microscopy and nuclear magnetic resonance. It discusses the main modified starches applications and enzymes used on starch industry. It also addresses starch characterization at the granular, macromolecular, and rheological levels.

Under the editorial guidance of renowned food scientist, Andréa Curiacos Bertolini, this book to address starch characterization, applications and biodegradation of starch blends, making it an ideal resource for researchers and product developers interested in starch characterization, nanocomposites, and biopolymer degradation.

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