

# BIOPOLYMERS AND BIOPLASTICS

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Abstract: This paper discusses the synthesis and characterization of biodegradable polymers and their applications in the field of bioplastics. The focus is on the development of new materials that are both environmentally friendly and mechanically strong. The synthesis of these polymers is typically carried out through a series of chemical reactions, including the use of renewable resources as starting materials. The resulting polymers are then characterized using various techniques, such as Fourier transform infrared spectroscopy (FTIR) and nuclear magnetic resonance (NMR), to determine their chemical structure and properties. The mechanical properties of these polymers are also studied, and their potential applications in the field of bioplastics are discussed. The paper concludes by highlighting the challenges and opportunities in the development of biodegradable polymers and bioplastics.