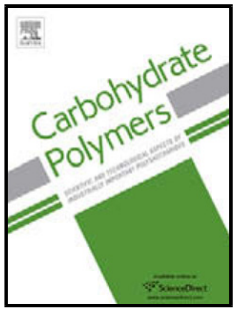

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Preparation and Characterization of Self-photostabilizing UV-durable Bionanocomposite Membranes for Outdoor Applications

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Highlights

- **UV resistant, biodegradable and durable nanocomposite membrane of chitosan and ZnO nanoparticles were prepared and characterized.**
- **The membranes showed better wettability behaviour**
- **Application in packaging of food materials, agricultural products and other outdoor applications**

Abstract

Here, we report a durable and ultraviolet (UV) resistant nanocomposite membrane of chitosan (CS) with effective photostabilization ascribed to Zinc oxide (ZnO) nanoparticles. Zinc oxide