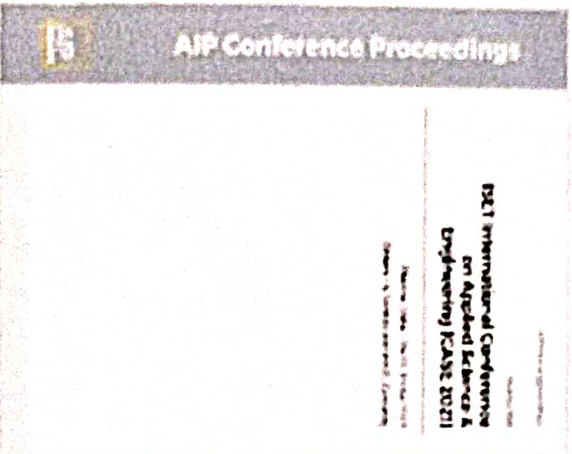




New insights on polyurethane biodegradation

Aiswarya Rajan, S. Vijayalakshmi



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Polyurethane (PU) is a general word for a group of polymers formed by combining polyisocyanate with a polyol. Polyurethanes are a versatile and significant family of man-made polymers that are utilized in a wide range of medicinal, automotive, and industrial products. PU can take on a variety of shapes, from low density to the solid elastomer, and flexible to stiff, based on the chemical structures of the polyisocyanates and polyols. Over three-quarters of global Polyurethane, use is in the form of foams, accounting for about 5% of total plastic production. Microorganisms break down polymers to create smaller substrates that can be absorbed via the cellular membrane. PUs is more sensitive to microbial degradation than polyether polyurethane.

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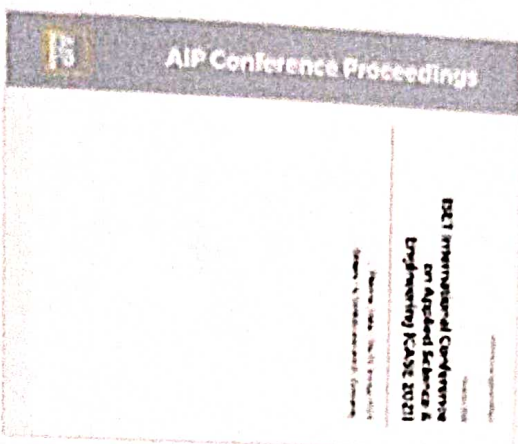
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