



## Review Article

### TECHNICAL ADVANCEMENT IN BIODEGRADABLE POLYMERS AND THEIR RECENT PATENTS

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#### ABSTRACT

The plethora of drug therapies and types of drugs demand different formulations, fabrications conditions and release kinetics. No single polymer can satisfy all the requirements. Therefore there have been tremendous advances in area of biodegradable copolymers over the last 30 years. This article reviews current research on biodegradable polymers, focusing their potential as drug carries. The major classes of polymers are briefly discussed with regard to synthesis, properties and biodegradability, and known degradation modes and products are indicated based on studies reported in the literature. A vast majority of biodegradable polymers studied belongs to the polyester family, which includes polyglycolides and polylactides. Other degradable polymers such as polyorthoesters, polyanhydrides and polyphosphazenes are also discussed and their advantages and disadvantages are summarized.

**Keywords:** Biodegradable, Mechanism of Deg

limited by the polymer permeability and the characteristics of a drug increase, its diffusion coefficient decrease.

There is no need for a second surgery for removal of Polymers.

Avoid stress shielding

Offer tremendous potential as the basis for controlled drug delivery.<sup>[10]</sup>

**Advantage of biodegradable polymers:-**

It provides drug at a constant controlled rate over a prescribed period of time.

The polymer carrier would degrade into nontoxic, absorbable sub











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