

# Novel Biodegradable Polymers and Scaffolds for Tissue Engineering

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Biodegradable polymers are important for subcutane medical applications such as drug delivery, implants, suture materials, and tissue engineering. For bone tissue engineering new biodegradable polymers with excellent mechanical properties may be required as well as special scaffold design.

Here we will present new synthetic routes to new biodegradable polyesters and their invitro degradation behaviour [1-7]. Speciality scaffold design based on electrospun polylactide nanofibers [8] will be reported as well as their compatibility to mesenchym stem cells for applications in tissue engineering [9]. Bacteria containing electrospun nanofibers will be reported as a potentially new biohybrid material for applications in tissue engineering [10].

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