

CALL FOR PAPERS

Tissue restoration is a complex event, where the architectures of the newly formed tissues are determined by a series of cell growth and transportation events. In recent years, the use of polymer scaffolds has become a popular approach due to their outstanding biocompatibility, tailorable biodegradability, and high levels of mechanical support for the surrounding tissue. In particular, current strategies in the design of polymer scaffolds for tissue repair and regeneration focus on the controlled release of small molecular drugs, proteins and peptides, and genes, as well as the use of their physicochemical properties, such as surface roughness, wettability, and hardness, to promote and guide cell growth. While polymer tissue scaffolds are excellent candidates to act as a temporary matrix for cell proliferation and extracellular matrix deposition, the understanding of desirable interactions between cells and the tissue scaffolds remains the main challenge in the field.

This special issue aims to present recent research progress, developments, and applications of polymer scaffolds for tissue regeneration, including theoretical studies, computational simulations, and experimental investigations. Other high-quality submissions related to synthesis and characterizations of polymer scaffolds for tissue repairs are also encouraged, including review articles on current trends and the current state of research into interactions between polymer scaffolds and cell growth.

Potential topics include but are not limited to the following:

- ▶ Polymer scaffolds for regeneration of bone, cartilage, ligament, skin, vascular tissues, neural tissues, skeletal muscle, etc.
- ▶ Controlled delivery of chemical and biological agents from polymer scaffolds to promote tissue regeneration
- ▶ Advanced fabrication technologies for construction of polymer scaffolds in target tissue/organ repairs
- ▶ Relationships between the materials properties of the polymer scaffolds and their biomedical functions in tissue engineering
- ▶ Interactions of polymer scaffolds and cell behavior

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/apt/psit/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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