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Functional Polymer Materials for Cell-Based Tissue Regeneration

Guest Editor:

Message from the Guest Editor

Prof. Dr. Ying-Chieh Chen

Department of Materials Science and Engineering, National Tsing-Hua University, Hsinchu 30013, Taiwan

Deadline for manuscript submissions: closed (31 December 2021) Dear Colleagues,

Cell-based therapy is a promising approach for the treatment of various diseases and injuries. This Special Issue aims at presenting the main advances in the field of biomimetic polymers for cell-based therapies in tissue engineering and regeneration. Multiple cell types can be utilized in such therapies, including stem, progenitor or primary cells. Biomimetic polymers have been designed as the cell delivery vesicle to elicit specific cellular functions, to direct cell-cell interactions, to improve their biological functions, and accelerate tissue repair at the designated site. Additionally, the functions of delivered living cells can regulated by stimuli-responsive multifunctional be polymers which respond to changes in the surrounding microenvironment to speed up wound healing. This Special Issue covers but is not limited to such topics as smart biomimetic polymers, multifunctional polymers, bioactive polymers, biodegradable polymers, microfabrication of polymers, regenerative medicine, hard and soft tissue regeneration, in vitro studies, in vivo investigations, preclinical studies, and clinical applications.

Prof. Dr. Ying-Chieh Chen Guest Editor









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Editor-in-Chief

Prof. Dr. Alexander Böker

Lehrstuhl für Polymermaterialien und Polymertechnologie, University of Potsdam, 14476 Potsdam-Golm, Germany

Message from the Editor-in-Chief

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