Special Issue

Polymer-Based Dressings for Skin Regeneration and Wound Dressing Applications

Message from the Guest Editors

Biopolymer-based wound dressing materials have interesting properties that promote wound healing and accelerated skin regeneration. These properties include excellent biodegradability and biocompatibility, nontoxicity, low antigenicity, and the capability to induce cell migration and proliferation. However, biopolymer-based wound dressings suffer from poor mechanical performance, which can be addressed by combining them with synthetic polymers to produce hybrid wound dressings. The polymer-based materials can be formulated into different forms, such as hydrogels. nanofibers, films, membranes, foams, wafers, sponges/bandages, and composites, depending on the nature of the wound. These wound dressing scaffolds can be loaded with bioactive agents such as antibiotics, essential oils, growth factors, vitamins, and others to improve their biological activities. This Special Issue aims to highlight the potential outcomes of polymerbased wound dressing materials from the preclinical and clinical trials of wound healing and skin regeneration.

Guest Editors

Prof. Dr. Blessing Atim Aderibigbe Department of Chemistry, University of Fort Hare, Alice Campus, Alice 5700, Eastern Cape, South Africa

Dr. Sibusiso Alven Department of Chemistry, Nelson Mandela University, Port Elizabeth 6001, South Africa

Deadline for manuscript submissions

28 February 2025



Pharmaceutics

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 7.9 Indexed in PubMed



mdpi.com/si/199488

Pharmaceutics MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 pharmaceutics@mdpi.com

mdpi.com/journal/ pharmaceutics





Pharmaceutics

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 7.9 Indexed in PubMed





About the Journal

Message from the Editor-in-Chief

Pharmaceutics (ISSN 1999-4923) is an online open access journal on the science and technology of pharmaceutics and biopharmaceutics. The scientific community, the wider community and the general public have unlimited and free access to the content as soon as a paper is published; this open access to your research ensures your findings are shared with the widest possible audience. Please consider publishing your impressive work in this high quality journal. We would be pleased to welcome you as one of our authors.

Editor-in-Chief

Prof. Dr. Patrick J. Sinko Department of Pharmaceutics, Ernest Mario School of Pharmacy, Rutgers University, Piscataway, NJ 08854, USA

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Embase, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Pharmacology and Pharmacy) / CiteScore - Q1 (Pharmaceutical Science)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 15.5 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the second half of 2024).