



## Polymer-Based Dressings for Skin Regeneration and Wound Dressing Applications

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, P.O. Box  
77000, Port Elizabeth 6001, South  
Africa

Deadline for manuscript  
submissions:

**28 February 2025**

### Message from the Guest Editors

Dear Colleagues,

Biopolymer-based wound dressing materials have interesting properties that promote wound healing and accelerated skin regeneration. These properties include excellent biodegradability and biocompatibility, non-toxicity, 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 polymer-based wound dressing materials from the preclinical and clinical trials of wound healing and skin regeneration.

Prof. Dr. Blessing Atim Aderibigbe

Dr. Sibusiso Alven

*Guest Editors*





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### Prof. Dr. Patrick J. Sinko

Department of Pharmaceutics,  
Ernest Mario School of  
Pharmacy, Rutgers University,  
Piscataway, NJ 08854, USA

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Pharmaceutics Editorial Office  
MDPI, Grosspeteranlage 5  
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