Special Issue

Pegylation in Drug Delivery Applications

Message from the Guest Editor

Pegylation in the pharmaceutical field is understood as the covalent or non-covalent attachment of PEG (polyethylene glycol) chains to a functional molecules or delivery systems, such as nanoparticles. This strategy is very effective in improving pharmacokinetics and reducing toxicity: it has become the main approach to overcome the limitations of biological drugs and to increase the efficiency of drug delivery in general. Pegylation might result in higher solubility in water, decreased renal clearance, lower aggregation, opsonization and phagocytosis, as well as protection against in vivo degradation. Overall, it may prolong systemic circulation time. Today, several pegylated drugs and nanostructures are approved and, in spite of recent concerns regarding the immunogenicity of PEG, no alternative polymer has proven to be better in reducing protein drugs immunogenicity. In this issue, we will explore the versatility of this technology in improving drug delivery, including the principles and peculiarities of different applications, as well as novel trends. Prof. Dr. Carlota O. Rangel Yagui

Guest Editor

Prof. Dr. Carlota O. Rangel-Yagui

Department of Pharmaceutical and Biochemical Technology University of São Paulo, São Paulo, Brazil

Deadline for manuscript submissions

closed (30 July 2022)



Pharmaceutics

an Open Access Journal by MDPI

Impact Factor 5.5 CiteScore 10.0 Indexed in PubMed



mdpi.com/si/78508

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

mdpi.com/journal/pharmaceutics





an Open Access Journal by MDPI

Impact Factor 5.5 CiteScore 10.0 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

Ernest Mario School of Pharmacy, Rutgers, The State University of New Jersey, William Levine Hall, Room 225C, 160 Frelinghuysen Road, Piscataway, NJ 08854-8020, 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 14.9 days after submission; acceptance to publication is undertaken in 3.3 days (median values for papers published in this journal in the first half of 2025).

