Special Issue

Advances in Analysis and Modeling of Solid Drug Product

Message from the Guest Editors

In the last couple of years, there have been huge advances in experimental analysis and modeling of solid drug product manufacturing processes. High attention to digitalization has triggered research of real-time release testing and process control, leading to the new concept of Pharma 4.0. Significant improvement in computational power has also contributed to the progress of modeling studies. Moreover, pharmaceutical science and engineering have joined forces, leading to exciting breakthroughs in solid drug product manufacturing. Experts are developing and using Process Analytical Technology tools to bring new fundamental insights regarding the process while monitoring and improving production by use of advanced process control. The Special Issue aims to bring state-of-the-art research, critical reviews, and perspectives related to the current status and challenges in the analysis and modeling of solid drug product manufacturing processes. Research areas may include (but are not limited to) the following: design of experiments, data-driven modeling/analysis, mechanistic modeling, hybrid modeling, uncertainty analysis, and real-time monitoring/release testing.

Guest Editors

Prof. Dr. Ashish Kumar

Pharmaceutical Engineering Research Group (PharmaEng), Department of Pharmaceutical Analysis, Ghent University, Ottergemsesteenweg, B-9000 Ghent, Belgium

Dr. Kensaku Matsunami

Davidson School of Chemical Engineering, Purdue University, West Lafayette, IN, USA

Deadline for manuscript submissions

31 October 2025



Pharmaceutics

an Open Access Journal by MDPI

Impact Factor 5.5 CiteScore 10.0 Indexed in PubMed



mdpi.com/si/216638

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

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 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).

