# Special Issue

# Recent Advances in Non-Viral Vectors for Gene Therapy and Gene Delivery

## Message from the Guest Editor

-

This Special Issue aims to collate mechanism-anchored research that advances the efficacy, specificity, and safety of non-viral gene delivery vectors, positioned within the core disciplines of formulation science, biopharmaceutics, pharmacokinetics, and nanomedicine. For this Special Issue, original research articles and reviews are welcome to be submitted. Research areas may include, but are not limited to, the following:

- Lipid, polymer, peptide, extracellular vesicle, and inorganic carrier platforms;
- Tissue-selective targeting, biodistribution, and barrier traversal in vivo;
- Cellular uptake pathways, endosomal escape mechanisms, and organelle routing;
- Immune interactions, reactogenicity mitigation, and tolerability profiling;
- Scalable manufacturing and CMC, including stability and analytical release testing;
- Microfluidic synthesis, process intensification, and quality-by-design;
- Quantitative PK/PD modeling, systems analysis, and imaging-guided tracking;
- Delivery of CRISPR/Cas systems, base/prime editors, and antisense oligonucleotides;
- mRNA and self-amplifying RNA vaccines, protein replacement, and gene modulation.

## Guest Editor

Dr. Hyun-Ouk Kim

Department of Biotechnology and Bioengineering, Kangwon National University, Chuncheon 24341, Republic of Korea

## Deadline for manuscript submissions

28 February 2026

# Pharmaceutics

mdpi.com/journal/
pharmaceutics

# 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).

MDPI