

## Special Issue

# Innovations in Drug Delivery: Tackling Challenges and Exploring Emerging Trends

### Message from the Guest Editors

This Special Issue explores the evolving landscape of drug delivery. It offers a comprehensive analysis of four key categories of innovation in this field: drug delivery devices, intelligent systems, coupling-based approaches, and carrier-based targeted delivery mechanisms. Each is discussed in relation to its strategic intent and underlying methodology. With the convergence of pharmacy, materials science, and biomedicine, new opportunities have arisen for developing safer and more effective drug formulations, such as bio-based nanoformulations (i.e., extracellular vesicles). Despite their promise, concerns about the toxicity, immunogenicity, and long-term safety of certain nanocarriers must be carefully addressed. This Special Issue presents a curated overview of recent advances in drug delivery systems, alongside a critical evaluation of the technological hurdles and research gaps that remain in translating innovations into clinical applications. We invite original research and reviews on the preparation, characterization, application, and regulation of organic, inorganic, composite, and novel bio-based nanodrug delivery systems.

### Guest Editors

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### Deadline for manuscript submissions

31 January 2026



## Pharmaceutics

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Impact Factor 5.5  
CiteScore 10.0  
Indexed in PubMed



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