

Special issue on

Research progress of nano drug delivery systems

CALL FOR PAPERS

Submission Deadline: September 2, 2023

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This Issue is now open for submissions. Manuscripts should be submitted online at aber.apacsci.com by registering and logging in to this website. Then you can submit the manuscripts.

Papers are published upon acceptance, regardless of the Special Issue publication date.

In our journal *Nano Materials and Nano Drugs*, a special issue is calling for papers about nano drug delivery systems.

Drug delivery systems are formulations or devices enabling a therapeutic substance to selectively reach its site of action without reaching the non-target cells, organs, or tissues. They can be broadly described into four categories: routes of delivery, delivery vehicles, cargo, and targeting strategies. Research in newer drug delivery systems is being carried out in liposomes, nanoparticles, transdermal drug delivery, implants, microencapsulation, and polymers. The modern form of a drug delivery system should minimize side effects and reduce both dosage and dosage frequency.

Recently, nanoparticles have aroused attention due to their potential application for effective drug delivery. Nanoparticle drug delivery systems are engineered technologies that use nanoparticles for the targeted delivery and controlled release of therapeutic agents. They are a class of nanomaterials that can increase the stability and water solubility of drugs, prolong cycles, improve uptake into target cells or tissues and reduce enzymatic degradation, thereby improving the safety and efficacy of drugs.

The application of nanotechnology to drug delivery should enable the following benefits to be realized: Improve delivery of poorly water solubility of drugs; Provide site-specific targeting and reduce drug accumulation in healthy tissue; Help the drug to remain in the body long enough for effective treatment. However, the challenge remains the precise characterization of molecular targets and ensuring that these molecules are only expressed in the target organ to prevent effects on healthy tissue.

In this issue of *Nano Materials and Nano Drugs*, we are soliciting articles on the **design, characterization, production, challenges and application of nano drug delivery systems**. Potential topics include but are not limited to the ones mentioned above. We welcome the latest articles from scholars all over the world.