

Special Issue on
Functional Polymer-Based Triggered Drug Delivery Systems

CALL FOR PAPERS

A large volume of research has been conducted to overcome the challenges in the application of nanomedicine in the clinic; however, few nanotherapeutics have been approved by the FDA. Therefore, the development of intelligent drug delivery systems (DDSs) that can efficiently deliver cargo to the targeted site and release this cargo in a controlled manner is of great significance for the treatment of diseases such as cancer as well as infection. The targeted delivery of cytotoxic drugs to a specific site allows for a high local accumulation of drugs with reduced side-effects, and the triggered drug release profile with resisted drug burst release shows sustained therapeutic efficacy.

Inspired by the differences of metabolic profile between lesion and normal tissue (such as low pH value, high reducing agents' concentration, and specific receptors), functional polymer-based DDSs with stimuli responsiveness have attracted more and more attention and have been thoroughly investigated and extensively used for the treatment of diseases. Functional polymer-based DDSs have superior advantages such as technical ease, high biocompatibility and drug loading capacity, low toxicity, and highly efficient drug delivery, indicating that it might be a promising strategy to overcome the limitations and barriers in clinic.

This Special Issue focuses on the development of functional polymer-based triggered DDSs including polymeric micelles, hybrid nanoparticles, dendrimers, and prodrugs. We welcome submissions dealing with all aspects (synthesis, preparation, characterization, and application) of functional polymer-based DDSs and invite researchers to submit their original research or review articles.

Potential topics include but are not limited to the following:

- ▶ Development of functional polymer-based drug delivery systems
- ▶ Synthesis, characterization, and application of pH/redox-sensitive polymers
- ▶ Preparation, characterization, and application of polymer-based hybrid nanoparticles
- ▶ Synthesis, characterization, and application of functional dendrimers
- ▶ Synthesis, characterization, and application of stimuli-responsive prodrugs
- ▶ Fabrication of functional metal-polymer-based drug delivery systems
- ▶ Development of polymer-based nanomedicines for treatment of diseases

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/ijps/fpbbb/>.

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

Lead Guest Editor

Can Yang Zhang, Singapore-MIT
Alliance for Research and Technology,
Singapore
canyang.zhang@smart.mit.edu

Guest Editors

Juan Li, Beijing Institute of Technology,
Beijing, China
jli@bit.edu.cn

Wenjing Lin, Guangdong University of
Technology, Guangdong, China
wenjing.lin@gdut.edu.cn

Submission Deadline

Friday, 7 February 2020

Publication Date

June 2020