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Special Issue

STIMULI RESPONSIVE DRUG DELIVERY SYSTEMS

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AIM AND SCOPE

The effectiveness of a therapeutic on the outcome of disease treatment depends highly on its selective targeting of the diseased cells while leaving the healthy cells unaffected. The increase in available therapeutics and a better understanding of the mechanisms behind disease pathology, has stimulated innovative approaches to delivery strategies. One increasingly critical component of a drug delivery system is the ability to release the drug at high enough concentrations only at the target site in response to either endogeneous or externally applied stimuli. In this 'hot topic' thematic issue, we explore various drug delivery strategies to trigger the rapid release of therapeutics in response to a stimulus for targeted delivery.

Keywords: *Thermoresponsive materials, pH-sensitive materials, drug delivery, biologics, small molecules, self-assembly, gelation, liposomes, micelles, targeted delivery*

SUBTOPICS

1	**Biologically inspired drug delivery systems**	**4**	**Endogenous stimuli (changes in pH, enzyme concentration, redox gradients, etc.)**
2	**Supramolecular chemistry approaches**	**5**	**Self-assembly**
3	**Exogeneous stimuli (temperature, magnetic field, ultrasound intensity, etc.)**	**6**	**Bioactive functionalization for enhanced targeting**

SCHEDULE

Manuscript submission deadline	**July 1, 2014**
Peer Review Due	**August 1, 2014**
Revision Due	**September 1, 2014**
Notification of acceptance by the Guest Editor	**September 15, 2014**
Final manuscripts due	**October 1, 2014**

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