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## Nanoparticle-Hydrogel Composites for Biomedical Applications

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submissions:

**closed (30 November 2015)**

### Message from the Guest Editors

Dear Colleagues,

Embedding inorganic, organic or biological nanoparticles in hydrogels allows one to prepare hybrid materials capable of responding to a variety of stimuli from the surrounding environment. Nanoparticles can be simply entrapped in hydrogels, prepared inside the hydrogels or functionalized to work as a crosslinker of polymer chains. Incorporation of nanoparticles into hydrogels modifies the swelling degree and the physicochemical and mechanical properties of the polymer network. In the case of magnetic nanoparticles, the application of static/alternating magnetic fields offers the possibility of addressing and remotely modulating drug release from hydrogels.

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Special Issue



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## Message from the Editor-in-Chief

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