



## Magnetic Nanoparticles 2020

Guest Editor:

**Prof. Dr. Felisa Reyes-Ortega**

Visual Quality Research Group,  
Maimonides Biomedical  
Research Institute of Cordoba  
(IMIBIC), Reina Sofia University  
Hospital, University of Cordoba,  
14004 Córdoba, Spain

Deadline for manuscript  
submissions:

**closed (28 February 2021)**

### Message from the Guest Editor

The focus of this Special Issue involves the preparation, characterization, and applications of magnetic nanoparticles, with different geometries and functionalities, applied in biomedicine as a drug carrier, diagnosis imaging, tissue engineering, cell labelling, hyperthermia, magneto-rheological fluids, theranostic, micro- and nanochips, gene therapy, etc. Magnetic nanoparticles are potentially useful in biomedicine thanks to their response to magnetic fields. It allows local treatment in a specific site (target therapy), can be used to load and deliver sequentially different drugs combination (drug carriers) and can be easily functionalized to be biocompatible and nontoxic. Interest in magnetic nanoparticles, from its synthesis and surface functionalization strategies, and its stability in biological fluids, to the uptake by stem cells and the therapeutic efficiency has increased recently and multiple directions are ongoing in this research field. This Special Issue aims at publishing a collection of research contributions that illustrates recent achievements in all these aspects of development applied in the biomedical field.

