

CALL FOR PAPERS

Theranostics is a revolutionary treatment strategy, referring to the combination of accurate diagnosis and targeted therapeutics. Through the innovative combination of functional materials, highly potent and personalized theranostic agents can be developed. In particular, recent advances in different types of hybrid biomaterials have enabled a significant breakthrough in the field of theranostics, and both organic and inorganic biomaterials have demonstrated clinical benefits. Multidisciplinary collaborations between organic chemists, inorganic chemists, polymer scientists, engineers, biologists, and clinicians are important to take advantage of the optimized properties of different materials, address the multifaceted clinical challenges, and further broaden the theranostic applications. These collaborations are producing innovative hybrid materials, including organic-organic, inorganic-inorganic, organic-inorganic, and cell-based biohybrid, and taking advantage of their combinations to produce beneficial features for disease diagnosis and differentiation, guiding clinical therapy, and prognoses.

This special issue is motivated by the observation of increasing interest and emerging innovative research output shown in the field of polymer-based hybrid biomaterials. The purpose of this special issue is to collect and disseminate state-of-the-art research and advancements in the design, synthesis, characterization, and fabrication of various polymer-based hybrid materials for theranostic applications, including imaging, sensing, delivery, and therapy. Original research papers and comprehensive review articles are welcome.

Potential topics include but are not limited to the following:

- ▶ Design and synthesis of polymer-based hybrid materials for theranostic applications
- ▶ Polymer-based hybrid nanosystems for cancer-associated stimuli-driven turn on theranostics
- ▶ Microfluidic synthesis of polymeric nanohybrids for imaging-guided multimodal synergistic therapy
- ▶ Polymeric nanohybrids for multimodal imaging and cancer therapy
- ▶ Cell-polymer biohybrid drug delivery systems for imaging and cell therapy
- ▶ Bioinspired hybrid polymer and lipid building blocks for disease management
- ▶ Dendrimer nanohybrid systems for sensitive disease detection and translational medicine
- ▶ Protein-lipid nanohybrids for imaging-guided gene therapy
- ▶ Hybrid protein-inorganic nanoparticles for cellular mapping and tracing
- ▶ Hybrid polymer matrix as a scaffold for tissue engineering and long-term tracing
- ▶ Hybrid polymer-based medical devices for disease diagnosis, monitoring, and bioresponsive drug delivery

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

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

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