



## Biomedical Hydrogels: Synthesis, Design and Applications

Guest Editors:

**Prof. Dr. Li-Ming Zhang**

Material Science and Engineering  
School, Sun Yat-sen (Zhongshan)  
University, Guangzhou 510275,  
China

**Prof. Dr. Tze-Wen Chung**

Department of Biomedical  
Engineering, National Yang-Ming  
University, Taipei 11221, Taiwan

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### Message from the Guest Editors

Dear Colleagues,

Natural, synthetic, and composite hydrogels have received great attentions for wide biomedical applications. The advances have been achieved in both physically or chemically crosslinked hydrogels. In physically crosslinked hydrogels, the interactions between polymers chains in amphiphilic block and graft copolymers are established by ionic or hydrophobic interactions. In chemically crosslinked hydrogels, the covalent bonds are formed between polymer chains. The crosslinks hydrogels can be generated by radical polymerization, chemical reaction of complementary groups and enzymes. To explore novel biomedical functions, composite hydrogels were widely designed and developed. In this special issue, we will discuss and review recent progress in synthesis, design and applications of varying types of biomedical hydrogels for drug delivery, cell encapsulation, tissue engineering and varying aspects of biomedical applications including self-healing properties.





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## Editor-in-Chief

### Prof. Dr. Thomas J. Schmidt

Institute of Pharmaceutical  
Biology and Phytochemistry,  
University of Münster,  
Corrensstrasse 48, D-48149  
Münster, Germany

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*Molecules* Editorial Office  
MDPI, St. Alban-Anlage 66  
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