







Special Issue Reprint

# **Stimuli-Responsive Gels**

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ISBN 978-3-03897-210-5 (Softback) ISBN 978-3-03897-211-2 (PDF)



Although the technological and scientific importance of functional polymers have been well established over the last few decades, the most recent focus that has attracted much attention concerns stimuli-responsive polymer gels. These materials are of particular interest due to their abilities to respond to internal and/or external chemo-physical stimuli. Aside from the scientific challenges of designing stimuli-responsive polymer gels, the main technological interests concern numerous applications, ranging from catalysis in microsystem technology and chemo-mechanical actuators to sensors.

This Special Issue includes seventeen papers covering a wide range of subjects including thermo- and pH-responsive hydrogels, functionalized materials, supramolecular stimuliresponsive structures, composite hydrogels, sensors, and biomedical applications. Together, these contributions not only provide an excellent overview of the current state-of-the-art in the field but also point out exciting challenges and opportunities for future work. In a number of reviews the most recent findings on "Stimuli-Responsive Gels" are compiled in this book supplemented by original contributions





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