Special Issue

Thermoresponsive Polymers for Nanocatalysis

Message from the Guest Editors

Thermoresponsive polymers are a class of materials that experience a rapid and reversible change of their physical properties in response to a change in the temperature of the solution. One of the most studied thermoresponsive polymer is poly(N-isopropylacrylamide) (PNIPAM) due to its biocompatibility and LCST close to the human body temperature. Among their numerous applications, hydrogels made of thermoresponsive polymers have been recently used as 'active' or 'smart' carriers for catalytic metal nanoparticles since they not only stabilize the particles in solution but also change their catalytic activity and selectivity through the response of the hydrogel to small temperature changes in the solution environment. For that reason, such hybrid systems are commonly termed as nanoreactors.

The aim of this Special Issue is to highlight the progress and fundamental aspects for the synthesis, characterization and physicochemical properties of thermoresponsive polymers with applications in nanocatalysis.

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Message from the Editor-in-Chief

Since its foundation in 2009, *Polymers* has developed into an internationally renowned, extremely successful open access journal. The editorial team and the editorial board dedicatedly combine open-access publishing and high-quality rigorous peer reviewing. The performance of the journal has proven this strategy to be well-suited and highly successful. This is reflected in the increasing impact factor of *Polymers*, the most recent one being 4.7.

I would like to invite you to contribute to the success of the journal by sending us your high quality research papers. We would be pleased to welcome you as one of our authors.

Editor-in-Chief

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