Special Issue

Interpenetrating Polymer Networks as Versatile Materials

Message from the Guest Editor

Dear colleague, Interpenetrating polymer networks (IPN) are easily manufactured and therefore have multiple applications. IPNs can also readily incorporate non-polymeric materials such as metal nanoparticles, drugs, sensors, nanoclays, dendrimers, etc. Numerous techniques can be employed to produce IPNs and include, amongst others, LbL nanocoating, spin coating, spray coating, or mixing. An IPN construct is produced from at least two polymers that are combined through non-covalent intermolecular force interactions. However, the non-covalent combinations of IPNs do not exclude polymer reactivity. If the appropriate stimulus is applied to the IPN, it might form covalent bonds. The applications of IPNs are virtually unlimited. Recently, solar panel technology has benefitted significantly from IPNs. Hydrogels are also a lucrative field of investigation for drug delivery, stimuli-responsive materials, the production of conductive materials, batteries, tissue engineering ,and biopolymer technology. This Special Issue explores some of the latest developments in IPN science and its applications.

Guest Editor

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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

Prof. Dr. Alexander Böker
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