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# **Polymer in Confinement**

Guest Editor:

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Deadline for manuscript submissions:

closed (31 October 2018)

## **Message from the Guest Editor**

I would like to invite you to submit a contribution to a Special Issue on the properties of highly-confined polymers. Understanding fundamental changes of polymer conformation and dynamics under strong confinement could have implications in fields ranging from biophysics (gene translation, viral packing, bio-mechanics) to material science (thin film mechanics, filtration/ion-exchange membrane, drug delivery capsules). Strong confinement and surface interactions induce changes to polymer conformation, shifts in the polymer phase transition, enhance polymer knotting, and hinder or facilitate polymer transport in crowded environments. Recent advances in experimental and theoretical modeling have facilitated investigations of microtubules and actin fibers in the cell, DNA in nanopore/nanochannels, dense gels, and the cell nucleus, and large polymers adsorbed on surfaces. This Special Issue aims to provide a forum to discuss key present issues and current obstacles to spur research and solutions in this important area.













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## **Editor-in-Chief**

#### Prof. Dr. Alexander Böker

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## **Message from the Editor-in-Chief**

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