

INM-KOLLOQUIUM

“SLIDE-RING MATERIALS: NOVEL MOLECULAR CONCEPT FOR TOUGH POLYMERS”

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Montag, 26.03.2018, 11.00 Uhr

INM, Leibniz-Saal, Campus D2 5

Gastgeber: Dr. Carsten Becker-Willinger

We have recently developed a novel type of polymer network called slide-ring materials by cross-linking polyrotaxane, the supramolecular architecture with topological characteristics.1) In the network, polymer chains are topologically interlocked by figure-of-eight cross-links. The structure and physical properties of the polymeric materials are drastically different from conventional cross-linked or noncross-linked materials. The concept of the slide-ring gel is not limited to cross-linked gels but also includes elastomer, cross-linked polymeric materials without solvent. Accordingly it can be applied to wide area such as soft contact lens, paints, rubbers, soft actuator and so on. 2) Finally, I would like to introduce ImPACT (Impulsing Paradigm Change through Disruptive Technologies) program, which is promoting to create tough polymers by using the slide-ring materials as a key technology.

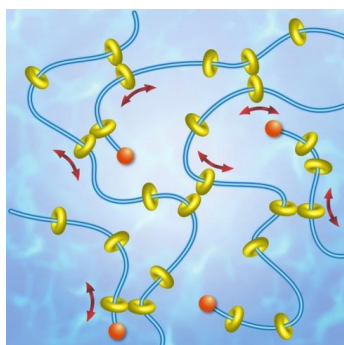


Fig.1. Schematic diagram of slide-ring materials.

(1) Y. Okumura and K. Ito, *Adv. Mater.*, 2001, 13, 485. (2) Y. Noda et al., *J. App. Polym. Sci.*, 2014, 131, 40509.

[Wir laden 15 Minuten vor Beginn zu einem Get-together mit dem Referenten ein.](#)

KONTAKT

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