PHOTOPOLYMERIZATION

Ju-Hyung Kim, Moon Jong Han, and Soonmin Seo present a technique for realizing an electrical circuit composed of organic devices on a highly flexible, stretchable, and patchable freestanding substrate, using an UV-curable polymer. Each organic device composing a circuit array is fabricated on a small individual polymeric plate, and connected to neighboring devices using polymeric bridges. The report on page 453, details how each polymeric bridge is formed in a spring shape, and shows high flexibility and stretchability, providing an excellent platform for the transference of electrical signals. Furthermore, the UV-curable polymer has intrinsic adhesive properties, which enable the mounting of freestanding polymeric substrate onto non-flat surfaces, with conformal contact.

SELF-ASSEMBLY

The cover shows snapshots of mixed micelles formed by chemically identical linear/star and star/star copolymer mixtures obtained from molecular dynamics simulations. On page 442, Othonas Moultos, Leonidas N. Gergidis, Andreas Kalogirou, and Costas Vlahos report that architectural asymmetry between chains induces effective interactions. The effective interactions cause a small decrease in the aggregation number of preferential micelles in linear/star mixtures, triggering the non-random mixing between the solvophilic moieties in the corona for all mixtures.