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**From molten to frozen Janus colloidal clusters** QIAN CHEN, JOSHUA RITCHEY, JING YAN, JEFFREY MOORE, STEVE GRANICK, University of Illinois at Urbana Champaign — Colloidal clusters self-assembled from amphiphilic Janus spheres in aqueous solutions are dynamic and interchangeable between different configurations. Here by grafting photosensitive polymeric coumarin onto one hemisphere of Janus particles, we freeze the clusters covalently by forming [2+2] cycloaddition of coumarin upon UV exposure. Monodisperse trimers and tetrahedron are harvested and used as secondary self-assembly building blocks.

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