Nanoparticle Driven Assembly of Ordered Polymer-Nanoparticle Hybrid Materials

Ordered polymer-nanoparticle (NP) hybrid materials are at the heart of many nanotechnology enabled applications in energy conversion, optical, magnetic and photonic devices, separations and sensors. The addition of NPs to block copolymer templates however often compromises order at modest loadings. CHM research has demonstrated that the use of strong specific interactions between the NP and one segment of the polymer can induce order in otherwise disordered materials at particle loadings of more than 30%.

Professor James Watkins,
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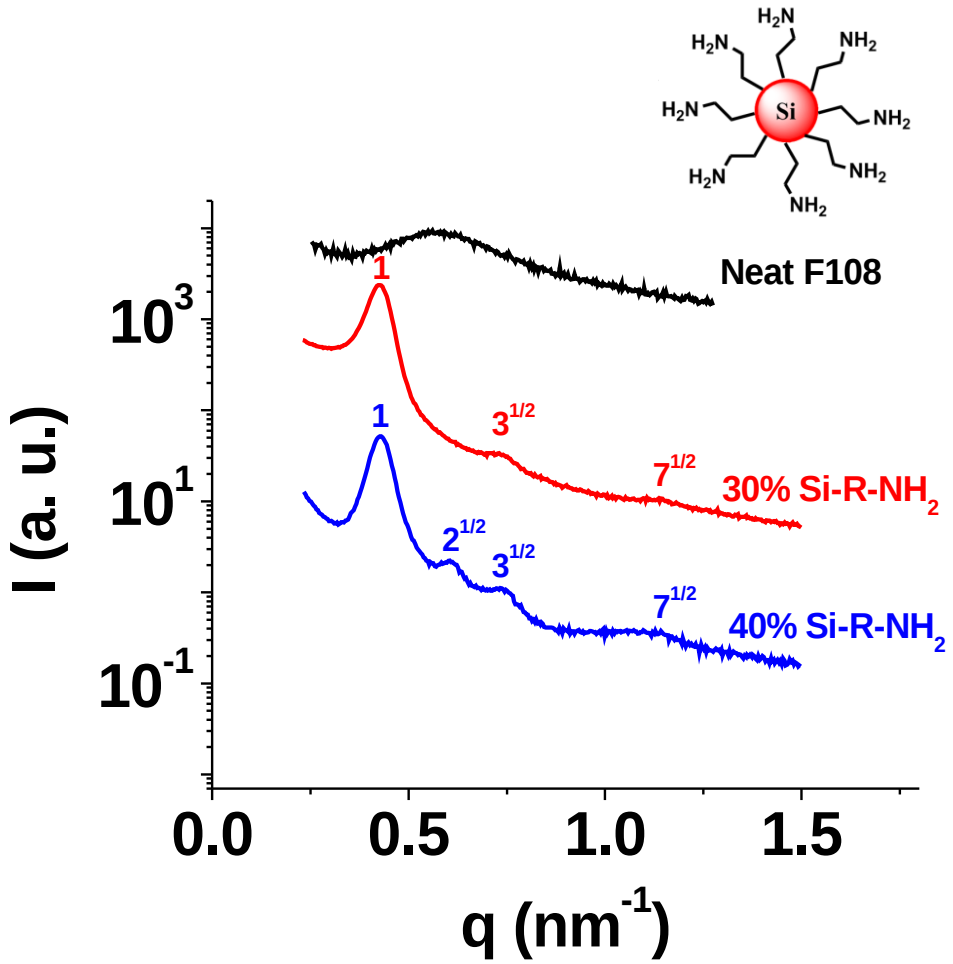

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This work supported by The Center for Hierarchical Manufacturing at the University of Massachusetts Amherst
CMMI-0531171

NSF