

Abstract Submitted
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Supramolecular Assembly of Tripodal Trisamides LI FENG, University of Akron — A series of tripodal trisamide compounds have been synthesized from tris(2-aminoethyl)amine (TREN) by condensation with different acid chlorides. Gelation of organic solvents with these compounds was investigated as a function of concentration and solvent solubility parameter. Compounds made with linear acid chlorides were poor gelators. A gelator made with 2-ethylbutyryl chloride (TREN-EB) was an excellent gelator for many organic solvents. It was found that the minimum gelation concentration of TREN-EB increased with increasing solubility parameter of the solvent. Thin films samples were prepared by spin-coating mixtures of TREN-EB and a poly(acrylate). Scanning force microscopy measurements showed that TREN-EB formed nanofibrillar network structures. In addition a dependence of the network morphology on the casting solvent was found.

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