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Polyester Spherulite Crystallization in Ionic Liquids KATHY SINGFIELD, SHAWNA MITCHELL, Saint Mary's University — A series of polyesters have been crystallized in ionic liquids. Spherulites of the polyesters have been grown isothermally from different ionic liquids after cooling the single phase polymer/ionic liquid system from above the polymer melting point temperature. To the authors' best knowledge this is the first reported account of polyester spherulites grown from these non-traditional solvents. The combination of physical properties of the crystallizing system supports the un-restrained branching/splitting volume-filling growth in all radial directions of the suspended crystallizing entity. The morphology of the collected spherulites at various stages of their formation was examined using scanning electron microscopy (SEM). The SEM results provide a clear visual inspection of the early-stage growth forms and the branching/splitting patterns involved in their evolution to the final spherical form.

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