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The study of polymer chain structure within macroporous polymer films by breath figure templating method MINSU LEE, JUNG O. PARK, 1. School of Polymer, Textile and Fiber Engineering, 2. Center for Advanced Research on Optical Microscopy (CAROM), Georgia Institute of Technology, MOHAN SRINIVASARAO[1], 1. School of Polymer, Textile and Fiber Engineering, 2. Center for Advanced Research on Optical Microscopy (CAROM), — Macroporous films produced by breath figure templating methods have a microstructure with close packed and highly ordered pores. The water droplets condense from humid air flowing over a dilute polymer solution in a volatile solvent, due to evaporative cooling. Then, the water droplets closely pack over and sink into polymer solution. A close packed array of water droplets produces thin walls of polymer films where the polymer chains are confined. In our study, we have some evidence of the deformation of polymer chain within macroporous polymer films in areas where the polymer is confined. We will present our result on the deformation of polymer chain structure within polymer films.

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