Characterization technique of wet-chemical etch polymer for optical devices application

Abstract

In this work, a wet-chemical etch polymer, Benzo Cyclobutene (BCB 4024-40) is characterized using the method of prism coupling. This method is used to characterize the polymer refractive index, variation of film thickness with spin coating speed and average value of polymer loss. The information obtained is appreciably useful, particularly in the actual design of optical waveguides and devices based on BCB 4024-40 polymer material.