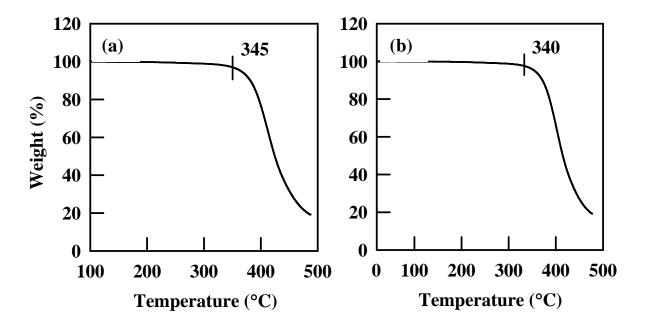
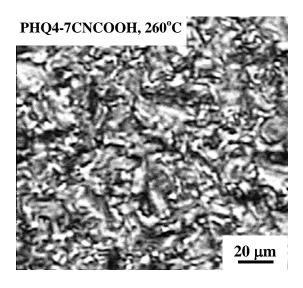
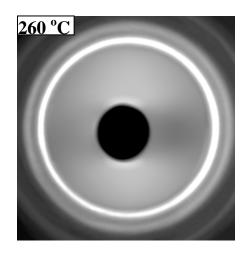
## **Supporting Information Available.**

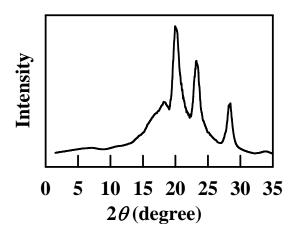


TGA data for (a) PHQ4 and (b) PHQ4-7CNCOOH, indicating that both polymers begin to undergo appreciable thermal degradation at  $340-345\,$  °C.



POM image of PHQ4-7CNCOOH at 260 °C.





The upper panel gives WAXD powder patterns at room temperature of an aspolymerized PHQ4 specimen, which was first heated to 260 °C (15 °C above the melting) at a heating rate of 20 °C/min, remained there for 10 minutes followed by rapid quenching into ice water. The lower panel gives  $2\theta$  scanning of the same specimen.