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Crystal Pattern and Orientation Structure of Poly Ethlyene Oxide at Surface¹ QI LIAO, Institute of Chemistry, Chinese Academy of Sciences, Beijing (100190), China — We try to develop a new morphological method to estimate the orientation structure of polymer crystal at the surface quantitatively. The crystalline structures of PEO single crystals on PVPY substrates were studied in dependence on the degree of supercooling. We show that the diverse patterns could be explained by the difference of crystal orientation. The edge-on and flat-on structure, as well as the patterns in the cross-over states, could give the information of molecular structure.

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