

Pt(111) 표면에서의 키랄성 분자들의 흡착 특성 연구

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The adsorption and desorption properties on Pt(111) of chiral molecules, propylene oxide (PO) and 1,3-dimethyl butylamine (DMBA), have been characterized in ultrahigh vacuum. Precision-doses of PO and DMBA onto a Pt(111) surface at 90 K have been achieved with a directed tubular molecular doser controlled by a micron-sized orifice and the reservoir gas pressure. Temperature-programmed desorption (TPD) mass spectra have been employed together with low-energy electron diffraction (LEED) analyses. In addition to the separate adsorption behaviors of PO and DMBA, the enantioselective adsorption of R- and S-PO on Pt(111) precovered with R- or S-DMBA have been investigated thoroughly, and the results will be presented.

Keywords: Pt(111)