

For a student to perform a quantitative analysis of the chemical treatment of PET (Polyethylene Terephthalate), they can utilize several analytical methods to measure the extent of degradation and identify the resulting compounds. Combined Absorption/ $^1\text{H}$  NMR Method: A combined approach using bulk absorption measurements and  $^1\text{H}$  NMR analysis can provide both qualitative and quantitative data on PET degradation products.