

**Applications of UV/Vis Spectra: The pKa of Para-Nitrophenol**

Examination of equilibria. UV/Vis spectroscopy can be used to determine acidities. The spectrum shows the pH-dependence of the absorption spectrum of para-nitrophenol. Determine the pKa. (Your result should be 7.16).

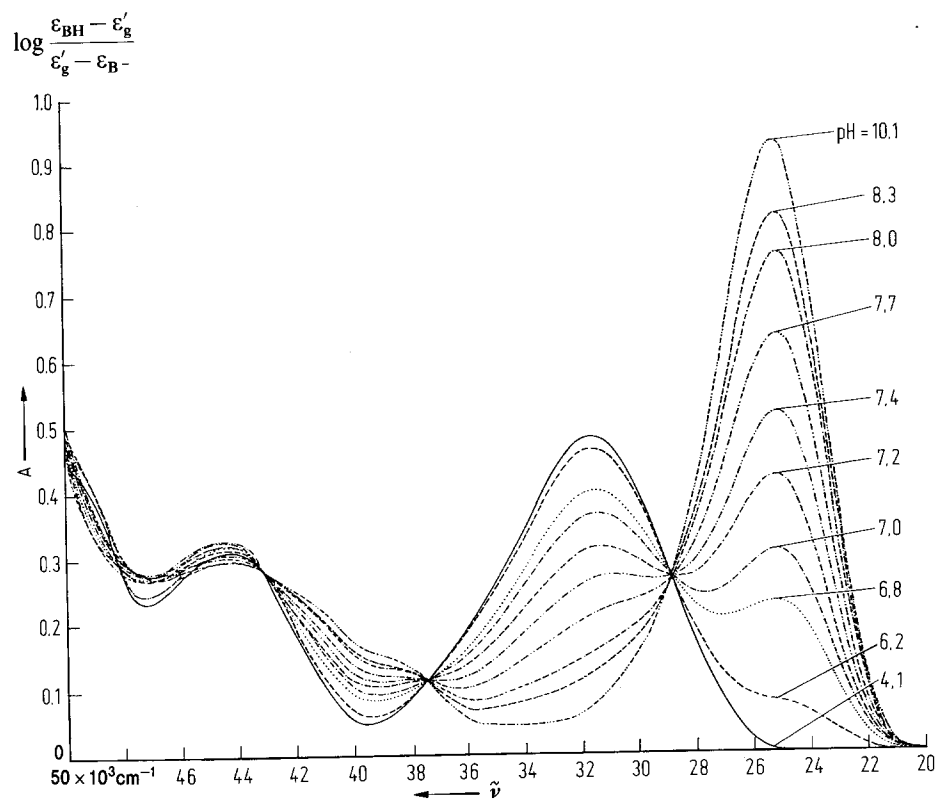


Fig. 50. pH-Dependence of the absorption spectrum of *p*-nitrophenol