THE IUE ULTRAVIOLET SPECTRUM OF PC 11

M. PARTHASARATHY
Indian Institute of Astrophysics, Bangalore, India
S.R. POTTASCH

Kapteyn Astronomical Institute, Groningen, The Netherlands

and

J. CLAVEL

IUE Observatory, Madrid, Spain

PC 11 (HD 149427, PK 331-5 1) is classified as a young planetary nebula with strong OIII 4363Å and a Zanstra temperature of $T_Z = 27000 K$. It is also classified as (D' - type) yellow symbiotic star with A - F type companion. It is an IRAS source with detached cold dust with far intrared (IRAS) colours similar to planetary nebulae. The IUE short wavelength (SWP) spectra show emission lines due to OIII] (1661/1666Å). NIII] (1746/1754Å) CIII] (1907/1909Å). The OIII] and NIII] emission lines show significant variation. Variation in the strength of CIII] is not very significant. The strength of OIII] has decreased and NIII] has increased. The long wavelength (LWP) spectrum shows stellar continuum (A-F) and absorption lines due Mg II 2800Å feature. It also show emission lines at 2772Å (?) 3133Å - 3140Å (very strong) (OIII, [FeV], 3209Å (He II?) ([FEII]). The variation in the strength of emission line due OIII] and NIII] and the presence of stellar continuum (A-F) suggests that the central star of PC 11 is a binary.