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PHYSICAL CONDITIONS IN THE COMPACT PLANETARY NEBULA Sw St 1

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Sw St 1 is a compact and possibly young planetary nebula which has been recently observed at infra red (Aitken et al., 1979) and radio (Kwok et al., 1981) wavelengths. In the 8-13  $\mu m$  region, a silicate emission feature is observed, suggesting that the nebular envelope is oxygen rich. The high emission measure determined from the radio observations implies a large value for the electron density.

We report optical (4260 <  $\lambda$  < 6710 Å) and IUE ultraviolet measurements of Sw St 1 which enable the interstellar reddening and physical conditions in the nebula to be determined. The IUE observations, taken at both low and high dispersion, serve to confirm that the envelope is oxygen rich (C/O = 0.5) and that the electron density is high ( $10^5$  cm<sup>-3</sup>).

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