

will be required to adequately represent the other objects in our sample.

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#### NEBULAR ABUNDANCES AND CENTRAL STAR PARAMETERS FOR EIGHT PN IN THE MAGELLANIC CLOUDS

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We have obtained ultraviolet and optical spectrophotometry for two PN in the SMC (N87, L302) and for six in the LMC (N28, N66, N97, N141, N201, N203). The data were obtained with the IUE (eight nebulae), the 3.9 m AAT (six nebulae) and the 1.9 m SAAO reflector (two nebulae). Nebular temperatures, densities and abundances are presented. The nebular continua were calculated and subtracted from the observed continua, allowing the central star energy distributions and hydrogen and helium Zanstra temperatures to be derived. Our results for the effective temperatures and absolute magnitudes and luminosities of the central stars are presented, including data on two Wolf-Rayet central stars (WC5 and WC8) and one Of central star.

The 1150-2000 Å spectrum of LMC N97 is extremely rich and includes lines of SiIII, SiIII) and FeIII. The overall spectrum appears to be a counterpart to that of the bipolar nebula NGC 6302 with, for example, significant amounts of nitrogen present in all stages from NI to NV. We find  $T(\text{OIII}) = 20,000 \text{ K}$ ,  $T(\text{NII}, \text{SII}, \text{OII}) = 13,000 \text{ K}$  and  $N(\text{SII}, \text{OII}) = 2.6 \times 10^3 \text{ cm}^{-3}$ . The helium abundance,  $N(\text{He})/N(\text{H}) = 0.18^e$ , agrees with that found by Osmer (1976) and is the same as that found by Aller et al. (1981) for NGC 6302. The heavy elements in N97 have about half the abundance relative to H compared to NGC 6302. We find for N97:  $\text{N}/\text{H} = 4(-4)$ ,  $\text{O}/\text{H} = 2.5(-4)$ ,  $\text{C}/\text{H} = 4(-5)$ ,  $\text{Ne}/\text{H} = 5.7(-5)$ .

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