Above, we considered the alkali-like sequences $1s^22s$ and $1s^22s^22p^63s$. We can also ask what lines arise from adjacent sequences. For the higher ionization sequences, *e.g.* $1s^2$, the next level is too high too produce transitions visible in our observable wavelength range, *e.g.* C V at $\lambda \sim$40Å. The next lower ionization sequences ($1s^22s^2$ and $1s^22s^22p^63s^2$) produce singlet lines blueward (since the presence of the additional S orbital electron raises the energy difference to the next available level) of the corresponding doublet lines in the alkali-like sequences. The isoelectronic sequence with 4 electron, Beryllium-like ($1s^22s^2$) configurations, yields the lines C III λ977, N IV λ765, and others. We also get C III] λ1908 and N IV] λ1486 from the same ground state, but since they are semi-forbidden they show up only in emission. The sequence with 12 electron, Magnesium-like ($1s^22s^22p^63s^2$) configurations, yields Al II λ1670, Si III λ1206, P IV λ950, etc. From the next lower ionization sequences we get many lines from the ground-state 2P or 3P orbitals, important lines (for us) include *e.g.* C II λ1334, N III λ989, and Si II λ1260.

These other lines may be important, however, usually the low ionization species have rather low fractional abundances in the highly ionized BALR, and the high ionization species have lines shifted too far in the UV to be easily seen from the ground. There are four principal factors which will tell us whether a resonance line may be visible: (1) rest wavelength of the line, (2) the elemental abundance, (3) the fractional abundance in the BALR, which depends on the model for the BALR and the ionization parameter (U), and (4) the oscillator strength of the transition which will (partially) determine the depth (and thus visibility) of the BAL trough. To establish a search list of BALs, we have taken the QSO absorption line search list from Morton *et al.* (1988), and determined the expected strength of the BALs based on the four factors listed above. Assuming $z_e \lesssim 3$ and ground-based observations, we have set a lower-limit cutoff at a rest wavelength of $\sim$930Å. We used the radiative-collisional equilibrium program CLOUDY (*cf.* Ferland and Truran 1981) to calculate fractional abundances for an optical thin N(H)$\sim 10^{18}$ cm^{-2} shell of gas. We have assumed solar abundances and used the default "AGN continuum" input spectrum in CLOUDY (see chapter 3) derived from Mathews and Ferland (1987).