CS AND HCO^+ IN PLANETARY NEBULAE

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Although the majority of stars in our Galaxy will end their lives as planetary nebulae (PNe), the molecular content of these sources is not well understood. At first glance, the high ultraviolet radiation field originating from the dying star as it becomes a white dwarf should photodissociate any molecules in the remnant AGB shell. However, molecular line studies of the Helix Nebula suggest that this picture is too simplistic. To further examine the question of molecular survival in PNe, molecular line observations are currently being carried out for CS and HCO^+ in a number of planetary nebulae using the Arizona Radio Observatory (ARO) telescopes. CS and HCO^+ have been detected so far in four PNe with some sources exhibiting interesting line profiles. A summary of current observations and an analysis of chemical complexity as a function of nebula age will be given.