REMPI AND ZEKE STUDIES OF METHYLENE RADICAL.

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The $3p$ and $4d$ Rydberg states of CH_2 have been reinvestigated by resonance enhanced multiphoton ionization (REMPI) spectroscopy. Methylene radical has been produced by photolysis of ketene. In addition, preliminary results of zero-kinetic-energy (ZEKE) photoelectron spectroscopy study of the ground state of CH_2^+ will be presented.