MULTICHANNEL QUANTUM DEFECT THEORY OF THE FORMYL RADICAL

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The high Rydberg states of the formyl radical (HCO) have been examined in great detail by means of double-resonance spectroscopy of vibrationally autoionizing states. Simulations utilizing the Rydberg formula have described these states in terms of a phenomological quantum defect (δ). We have used these assignments as a guide in applying the multichannel quantum defect theory (MQDT) to HCO. The current calculations include intensity as well as energy considerations, and will serve as a further guide toward the development of a complete polyatomic MQDT formalism.