CAVITY RING-DOWN LASER ABSORPTION SPECTROSCOPY OF IrC

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The absorption spectrum of IrC at wavelength between 445-500 nm has been investigated using the technique of laser vaporization/reaction with free-jet expansion and cavity ring-down laser absorption (CRLA) spectroscopy. IrC molecule was produced by reacting laser-ablated iridium atoms with methane seeded in argon. This wavelength region covers the (0,0), (1,0) and (2,0) bands of the L $^2\Phi_{7/2}$ - X $^2\Delta_{5/2}$ transition. Analysis of the spectra gives refined band origins, vibrational and rotational constants for the L $^2\Phi_{7/2}$ level.