

The ground electronic state of the C₃Kr van der Waals complex has been studied by the wavelength-resolved emission from the ˜A state. The vibrational levels of the C₃Kr complex have been compared with those of the C₃Ar to ensure the spectral assignments of these two complexes. The perturbation of the C₃ bending vibration (both in-plane and out-of-plane bending motion) by the rare gas atom has been observed; the vibrational amplitude of the C₃ bending motion of the complex becomes more restricted than the monomer.