P5076: INTERNAL ROTATIONS OF METHYL PIVALATE BY ROTATIONAL SPECTROSCOPY

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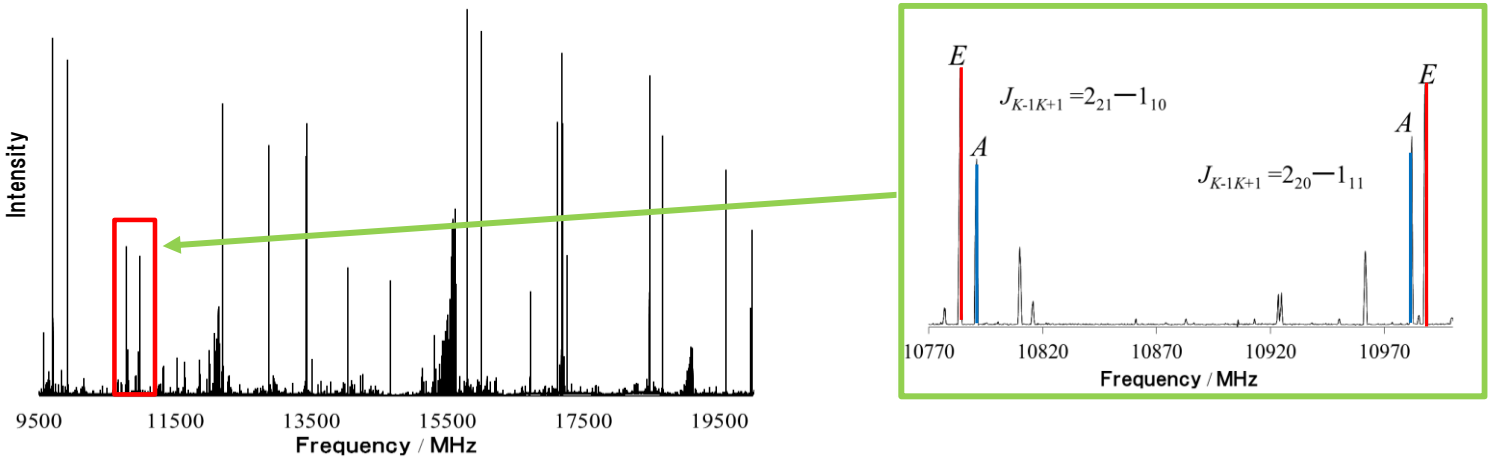
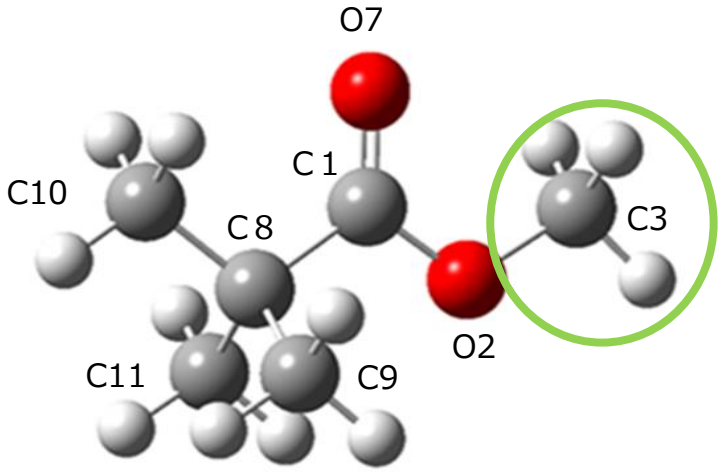
Fourier transform microwave spectroscopy (FTMW)

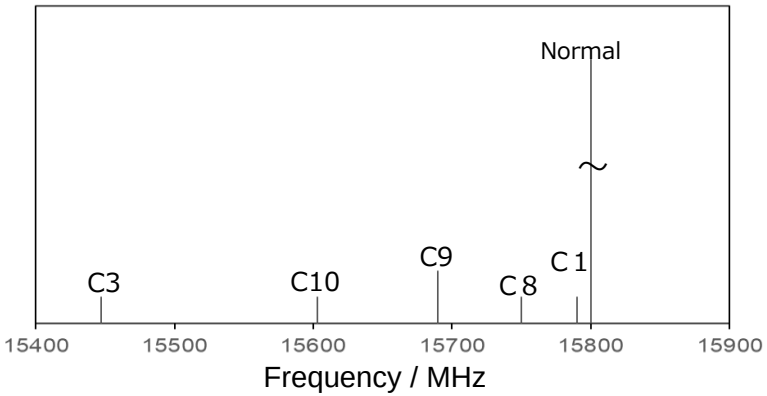
・A-E splitting of the rotational spectral lines indicate large-amplitude motion of the anti-conformer

・Determination of the molecular constants for five ^{13}C-isotopomers

Complementary results are obtained: t-Bu rotation (V_3 = 4.1(6) kJ mol^{-1} [343 cm^{-1}]) by gas electron diffraction and CH_3 rotation (V_3 = 5.1 kJ mol^{-1} [426 cm^{-1}]) by FTMW







anti-conformer