

Figure 4A.



Figure 4B.



Figure 4C.



Figure 4D.



Figure 4E.

Figure 4.

FTIR spectra of methyl cyanoacetate in Xenon matrix. "Annealing series" (with 7 curves). Trace 1 - spectrum recorded immediately after deposition (Knudsen cell nozzle kept at 293 K and cold substrate at 20 K during deposition). Traces from 2 to 7 - spectra of the same sample annealed to 30, 40, 50, 60, 65 and 70 K, respectively.

Part A: 3070-2830 cm⁻¹ region;

Part B: 1790-1740 cm⁻¹ (vC=O) region;

Part C: 1460-1160 cm⁻¹ region;

Part D: 1040-830 cm⁻¹ region;

Part E: 740-560 cm^{-1} region.



Figure 5B.

0.0

a b c d

1780

1780 1760 1740 WAVENUMBER / cm⁻¹



Figure 5C.



Figure 5D.



Figure 5E.

Figure 5.

FTIR spectra of methyl cyanoacetate in Xenon matrix. "Deposition series" (with 4 curves). Knudsen cell nozzle kept at 293 K in all the cases. Trace "a" - the same spectrum as Trace 1 in Figure 4 (cold substrate kept at 20 K during deposition). Traces "b", "c", "d" - cold substrate temperature during matrix deposition kept at 30 K, 40 K and 50 K, respectively. All traces normalized to the same peak intensity of the 1179.8 cm⁻¹ absorption (γ CH₃ A' mode of *syn*-form).

Part A: 3070-2830 cm⁻¹ region;

Part B: 1790-1740 cm⁻¹ (vC=O) region;

Part C: 1460-1160 cm⁻¹ region;

Part D: 1040-830 cm⁻¹ region;

Part E: 740-560 cm⁻¹ region.