Note on the Variation of Relative Intensities of Raman Lines of *n*-Pentane with Temperature.

By Hiroatu OKAZAKI.

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The Raman spectra of *n*-pentane were photographed at 32°C. and at −72°C. (the temperature of carbon dioxide and alcohol mixture) using the same arrangement. The photometer curves are shown in Fig. 1 and in Fig. 2, from which it is seen that relative intensities of Raman lines

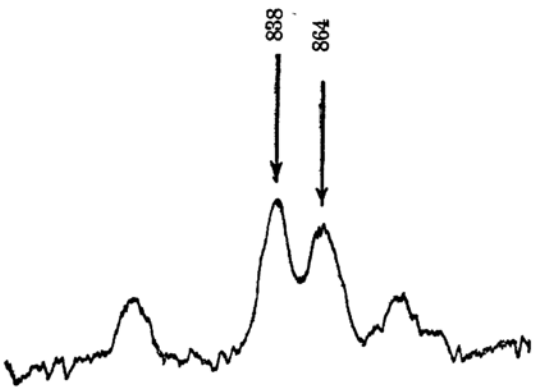

Fig. 1. 32°C.

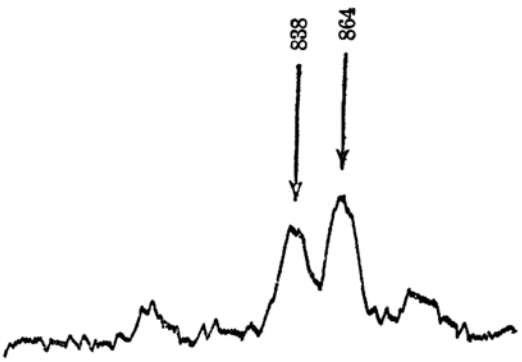

Fig. 2. −72°C.

changed with temperature, especially the intesity ratio of the two lines 838 cm.$^{-1}$ and 864 cm.$^{-1}$ is reversed at these two temperatures.

This change in intensity ratio is due to the change of equilibrium ratio of rotational isomers(2).

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Chemical Institute, Faculty of Science,
Imperial University of Tokyo.

(1) For details see H. Okazaki, *J. Chem. Soc. Japan*, **63**(1942), 1136.
(2) S. Mizushima and Y. Morino, this Bulletin, **17**(1942), 94.