

INFRA - RED SPECTROSCOPIC AND CIRCULAR DICHROISM STUDIES OF SOME FRIEDELANONES

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Infra-red (IR) spectroscopic and Circular dichroism (CD) studies of ketones are of wide interest as these data are useful in obtaining information on their structural and conformational aspects (Boul *et al.*, 1971; Djerassi *et al.*, 1959).

In the present investigation, we have synthesised a series of mono-, di-, and tri-ketones of friedelane triterpenes and the IR and the CD data have been recorded.

IR studies of 8 monoketones indicated that their carbonyl frequencies are location specific and found spread over a wide range (1670-1720 cm^{-1}). In di- and tri-keto series it was found that when the carbonyl groups are far apart, their individual frequencies correspond to those in mono-ketones within $\pm 5 \text{ cm}^{-1}$.

CD data were obtained for 5 mono-ketofriedelanes. It was found that the signs of the cotton effects are in agreement with those anticipated. These data should be of use in locating the carbonyl function and for their conformational studies in solution.

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References:

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