

## LANTHANIDE INDUCED SHIFT N. M. R. STUDIES OF SOME FRIEDELANONES

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Although Lanthanide induced shift (LIS) reagents have been employed widely in analysing complex proton nuclear magnetic resonance (N. M. R.) spectra of a variety of natural products (Demarco *et al.* 1970), very little studies have been made on friedelanones. In the present investigations we have measured the LIS for friedelan-1-one, friedelan 3-one, friedelan-6-one, friedelan-7-one, friedelan-21-one and friedelan-22-one, using  $\text{Eu}(\text{FOD})_3$  as the shift reagent.

LIS data are used to assign all the 8 methyl groups in the above friedelanones. These data could also be used to locate the carbonyl group in the friedelane skeleton where other methods are tedious (Gunatilaka *et al.*, 1979) or inapplicable.

### References:

1. Demarco, P. V., Elzey, T. K., Lewis, R. B., and Wenkert, E., (1970), *Journal of the American Chemical Society*, **92**, 5737.
2. Gunatilaka, A. A. L., Nanayakkara, N. P. D., and Sultanbawa, M. U. S., (1979), *Journal of the Chemical Society, Chemical Communications*, 434.