

This increase in $\{P\}$ is proportional to the magnitude of nephelauxetic effect $(1 - \beta)$. Contrary to this the observed intensities of these ternary complexes are very low ($P = 15.67 \times 10^{-6}$ to 17.76×10^{-6}). No doubt, amino acids are expected to form inner sphere complexes by forming an ionic linkage with carboxylic oxygen and an additional linkage due to the amino group. The infrared spectra in the solid state of these compounds also indicate inner sphere complexation but on dissolution it appears that amino group does not participate in coordination to the metal ion⁷.

The RMS deviation computed for energies and oscillator strength of all the four levels in the complexes varies from ± 96.75 to 126.5 and from $\pm 0.006 \times 10^{-6}$ to 1.63×10^{-6} respectively. The high values of RMS deviations may be attributed to the assumption of radial eigenfunction to be hydrogenic while deriving the energy relation.

The magnitude of $b^{1/2}$ which signifies the amount of $4f$ -ligand mixing has been correlated with the oscillator strength of the pseudohypersensitive transition ($^3P_2 \leftarrow ^3H_4$). It has been found that a linear relationship exists between p and $b^{1/2}$. The shift in the band, which determines the magnitude of $b^{1/2}$ is thus accompanied with increase in the intensity of the band. Since $b^{1/2}$ is related to nephelauxetic effect $(1 - \beta)$, $b^{1/2} = [(1 - \beta)/2]^{1/2}$ the magnitude of $(1 - \beta)$ is a measure of the extent of covalency in the metal ligand bond. Hence it may be concluded that the increase in the degree of covalency brings about the intensification of the band. The magnitude of $b^{1/2}$ was higher in MA_2B species as compared to the corresponding MAB_2 species showing that the covalency in the metal ligand bond is more when amino acid content in complexes is higher. A parallel behaviour is observed, i.e. the magnitude of oscillator strength was higher in MA_2B species as compared to that in MAB_2 species.

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ANNOUNCEMENT

SOVIET HONOUR TO ICMR HEAD

Prof. V. Ramalingaswamy, Director General of the Indian Council of Medical Research, New Delhi, has been elected an honorary member of the Soviet

Academy of Medical Sciences. The only other foreign scientist to be so honoured is the eminent urologist Moritz Bebel.