Studies on the chelation of cytosine, cytidine and cytidine phosphate with U(VI), Th(IV), Ce(III) and La(III), September 1984,

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Abstract:

The complexes formed between cytosine, cytidine and cytidine phosphate and U(VI), Th(IV), Ce(III) and La(III) have been investigated using spectrophotometric and conductometric methods. The apparent formation constants of these complexes have been calculated. The mode of bonding of the ligand in the solid chelates was studied by I.R. spectrophotometry which showed that chelate formation takes place through C(2)=O and C=N(3) groups in the case of cytosine and cytidine. The I.R. spectra of cytidine phosphate complexes indicated a tridentate ligand which coordinated via the former two groups and phosphate groups to the central metal ion.

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