

❖ Problems

- Q 1. How does the ligand field affect the choice between S_N1 and S_N2 paths in the substitution reactions of octahedral complexes? Also, explain how is this choice influenced by the basicity and π bonding capacity of a non-reacting ligand?
- Q 2. Discuss the mechanism of acid hydrolysis taking the example of the octahedral complex of Co(III).
- Q 3. What do you understand by S_N1CB ? Explain with example.
- Q 4. Explain the stereochemistry of S_N2 substitution reactions of octahedral complexes.
- Q 5. What is base hydrolysis? Discuss the possible mechanisms.
- Q 6. How does the racemization of tris chelate complexes take place?
- Q 7. Explain the mechanism of nucleophilic substitution reactions in octahedral complexes.
- Q 8. What are metal-aquo complexes? Also, draw and discuss the structure of eight and nine coordinated aquo complexes of trivalent lanthanide ions.
- Q 9. Give a brief discussion on important reactions of metal-aquo complexes.

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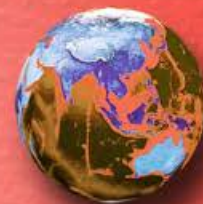
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Volume I

MANDEEP DALAL



First Edition

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Mandeep Dalal

(M.Sc, Ph.D, CSIR UGC - NET JRF, IIT - GATE)

Founder & Director, Dalal Institute

Contact No: +91-9802825820

Homepage: www.mandeepdalal.com

E-Mail: dr.mandeep.dalal@gmail.com

Mandeep Dalal is an Indian research scholar who is primarily working in the field of Science and Philosophy. He received his Ph.D in Chemistry from Maharshi Dayanand University, Rohtak, in 2018. He is also the Founder and Director of "Dalal Institute", an India-based educational organization which is trying to revolutionize the mode of higher education in Chemistry across the globe. He has published more than 40 research papers in various international scientific journals, including mostly from Elsevier (USA), IOP (UK) and Springer (Netherlands) .

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