
❖ Problems

- Q 1. Discuss the ionic movement under the influence of an electric field.
- Q 2. What are absolute and conventional ionic mobilities? How they are related?
- Q 3. Derive and discuss the relationship between ionic drift velocity and current density.
- Q 4. Define the diffusion coefficient. How it is related to the absolute mobility.
- Q 5. Derive Stokes-Einstein relation.
- Q 6. What is the Nernst-Einstein relation? What is its significance?
- Q 7. State and explain Walden's rule.
- Q 8. Explain the rate process approach to ionic migration in detail.
- Q 9. Derive the relationship between ionic drift and diffusion potential.
- Q 10. What are Onsager phenomenological equations? How they can be used to derive the basic equation of diffusion potential?
- Q 11. Write down the Planck-Henderson equation for monovalent electrolytes.

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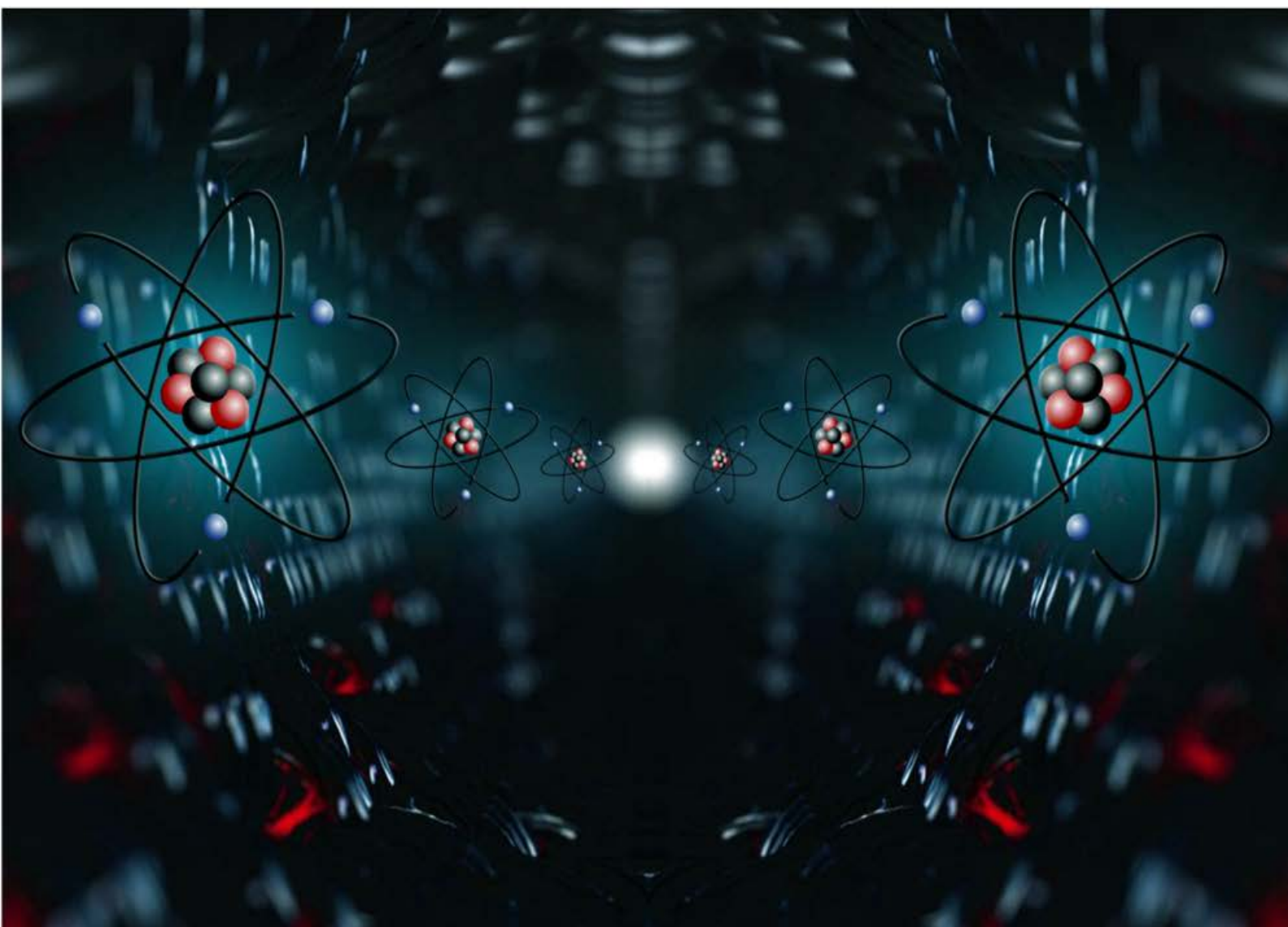
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Volume I

MANDEEP DALAL



First Edition

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