

NPTEL Video Lecture Topic List - Created by LinuXpert Systems, Chennai

NPTEL Video Course - Special Lecture Series - Thermodynamics of Materials

Subject Co-ordinator - Prof. Sir H. K. D. H. Bhadeshia

Co-ordinating Institute - IIT - Madras

Sub-Titles - Available / Unavailable | MP3 Audio Lectures - Available / Unavailable

- Lecture 1 - Basic thermodynamic functions: Enthalpy, entropy, configurational entropy, Gibbs free energy
- Lecture 2 - State of equilibrium: Chemical potential, activity, equilibrium between solutions
- Lecture 3 - Case study: Mechanical alloying, alloying by deformation.
- Lecture 4 - Computer calculation of phase diagrams
- Lecture 5 - Thermodynamics of irreversible processes: Multiple irreversible processes
- Lecture 6 - Quasichemical solutions