Advanced Thermodynamics Prof. B.S. Murty Department of Metallurgy and Material Science Engineering IIT Madras

Miscibility gap in phase diagrams

Questions:

- 1. Derive an expression for the temperature at which miscibility gap closes on heating?
- 2. What are the various models available for enthalpy of mixing?
- 3. How does a metastable phase diagram evolve at higher cooling rates in Mg-Si phase diagram?