

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

Precipitation

Questions:

1. What are coherent, semi-coherent and incoherent precipitates?
2. Why does precipitation occurs in a number of steps in many systems?
3. What is Ostwald step rule?
4. How one can generate GP Zone, θ'' , θ' solvus lines? How are they different from θ solvus?
5. What microstructure leads to peak hardening during ageing?
6. How does one increase the ageing kinetics?
7. How do aging temperature and composition of the alloy influence the age hardening curve?