

**Advanced Thermodynamics**  
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**Martensitic transformation, order-disorder transformation**

**Questions:**

1. What is the influence of deformation on martensitic transformation?
2. What is the influence of hydrostatic pressure on martensitic transformation?
3. Use free energy concept to explain how martensitic transformation temperature changes on deformation of a steel and on the application of hydrostatic pressure.
4. What is the difference between structural order and chemical order?
5. How is LRO defined? How can one calculate LRO from XRD studies?
6. How can one calculate the temperature at which order disorder transformation occurs?