

**Advanced Thermodynamics**  
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**Evolution of phase diagrams– Miscibility gap**

**Questions:**

1. How can you calculate the temperature at which a miscibility gap in a phase diagram closes?
2. What are bimodal points in a miscibility gap?
3. Why do you not have a driving force for an alloy outside the binodal points to decompose into two phases?
4. Demonstrate the existence of driving force for an alloy inside the binodal points to decompose into two phases.
5. How does the concentration profile look like when an alloy outside the spinodal decomposes into two phases?
6. What is the condition for spinodal decomposition?