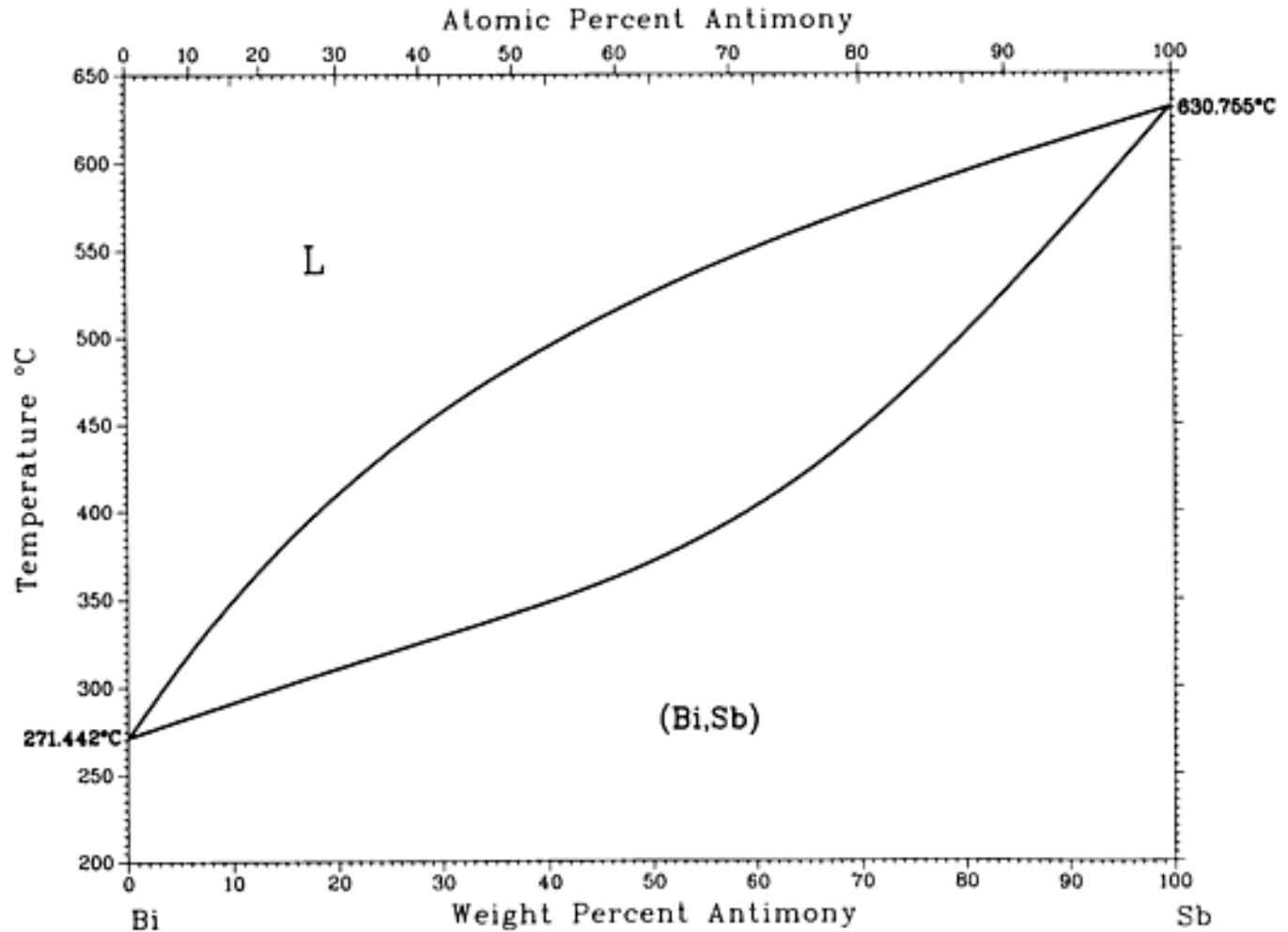


06

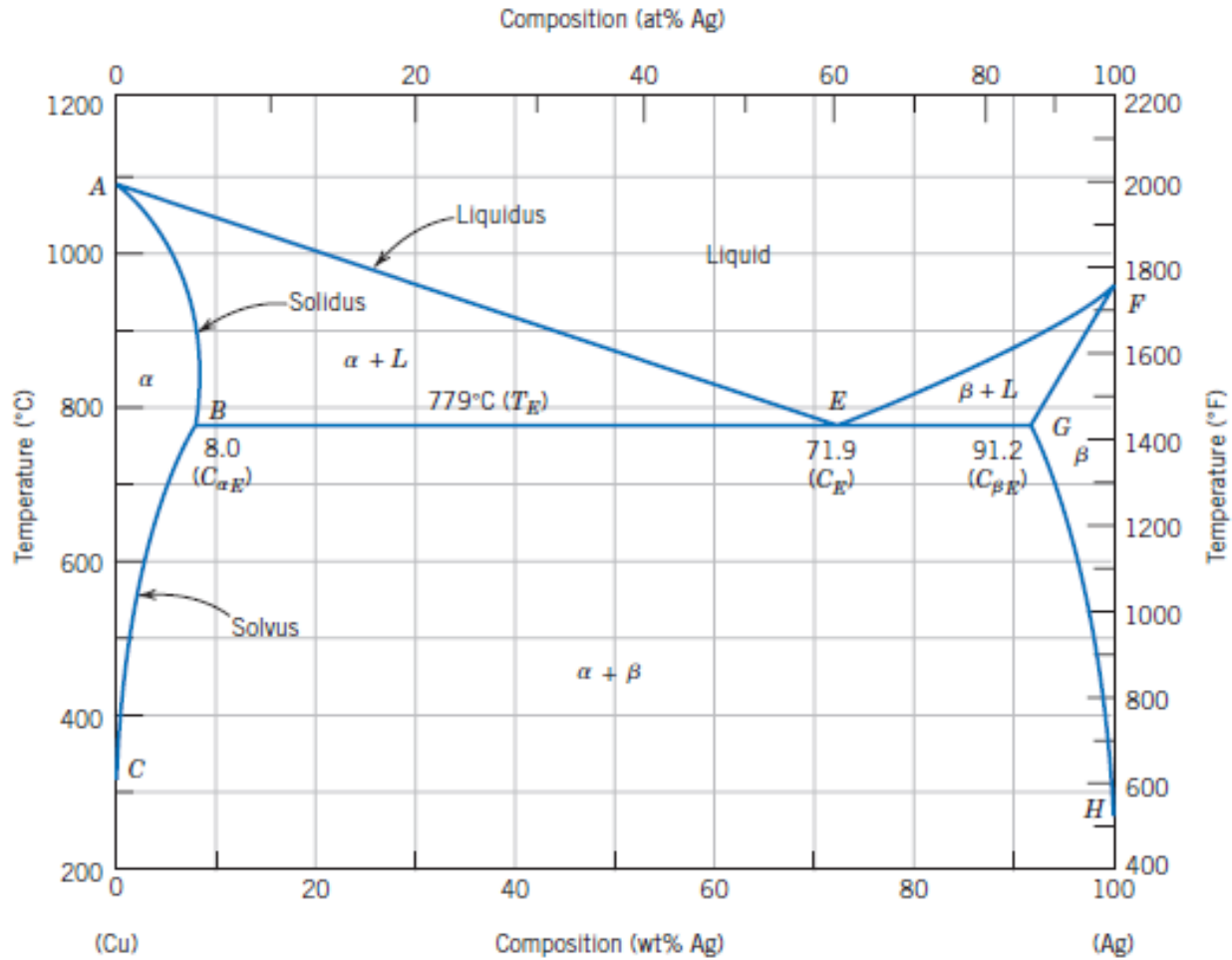
CIÊNCIA E ENGENHARIA DOS MATERIAIS

Engenharia de Produção / Engenharia Mecânica
Prof. Luis Fernando Maffei Martins

Diagrama isomorfo



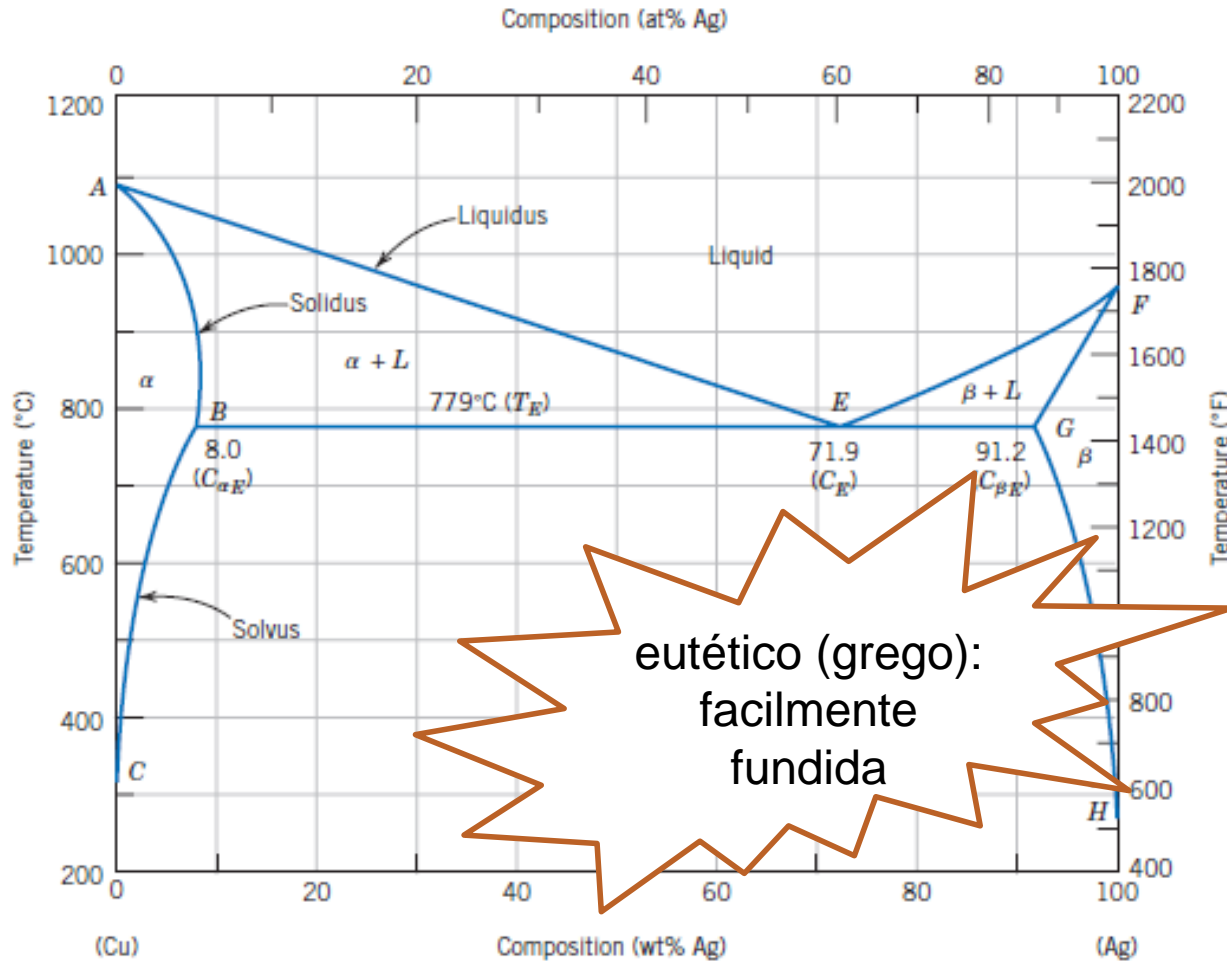
Diagramas eutéticos



Cu

Ag

Diagramas eutéticos



Cu

Ag

Reação eutética

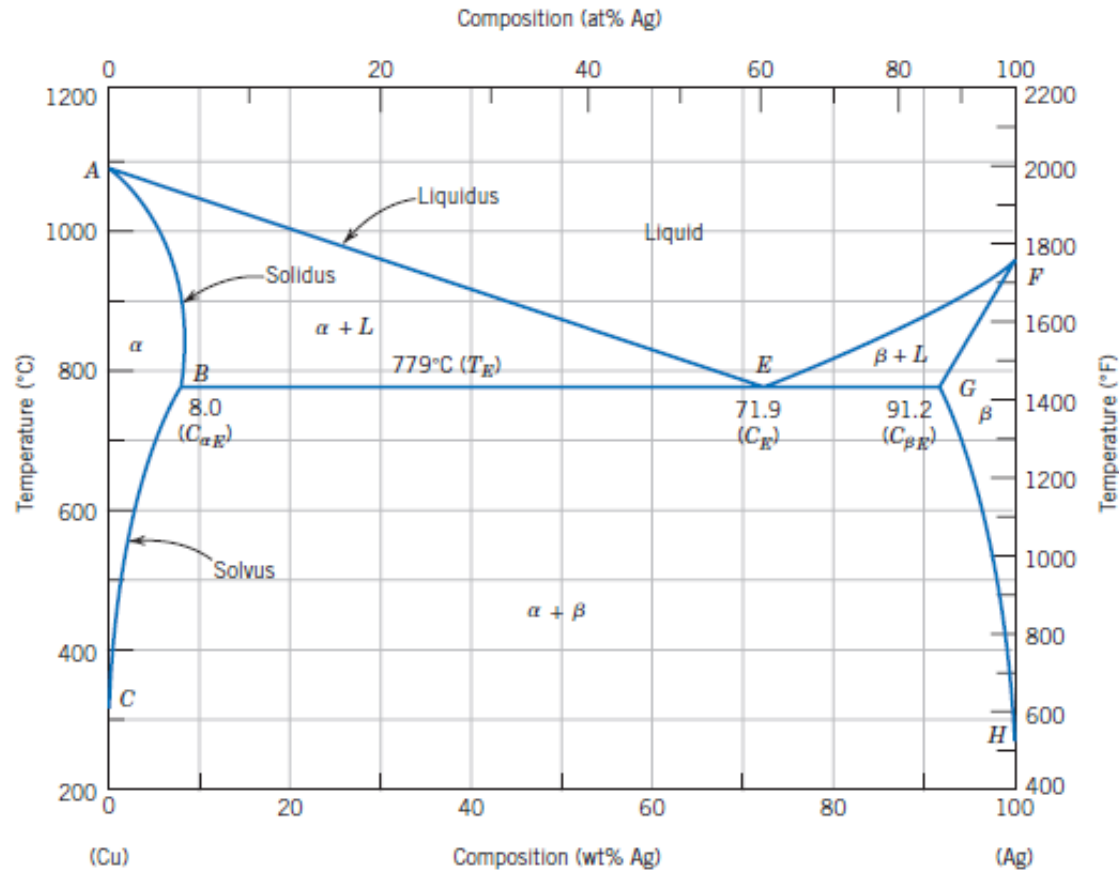
- Uma fase líquida, durante o resfriamento, se transforma em duas fases sólidas diferentes



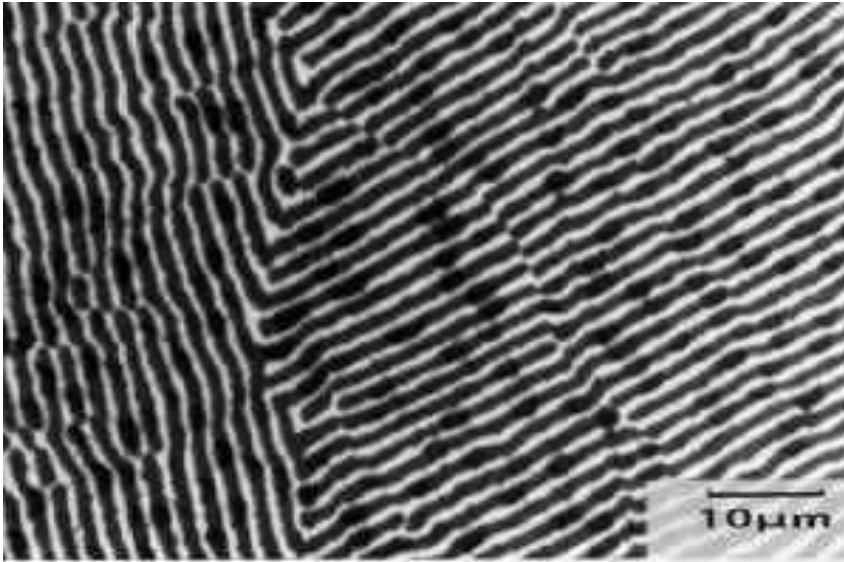
- A temperatura em que a reação eutética ocorre é denominada temperatura eutética.
- Durante o aquecimento, à temperatura eutética, as duas fases sólidas se transformam em uma única fase líquida



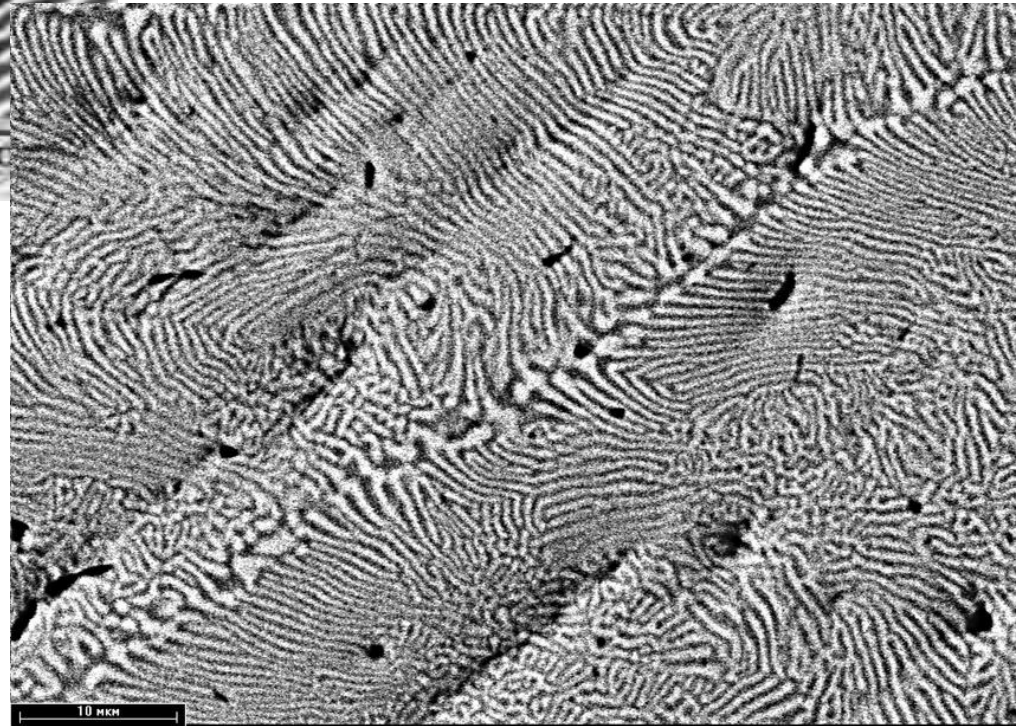
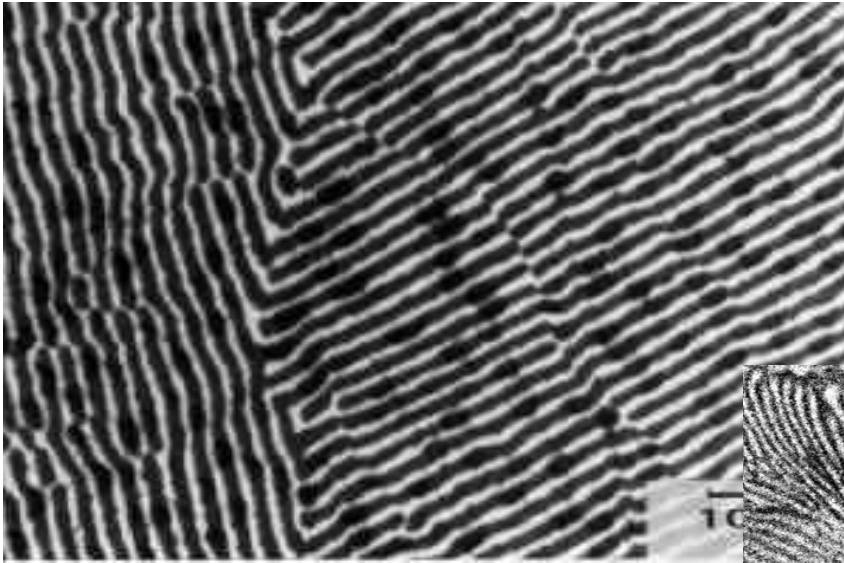
Reação eutética: $L \rightarrow \alpha + \beta$



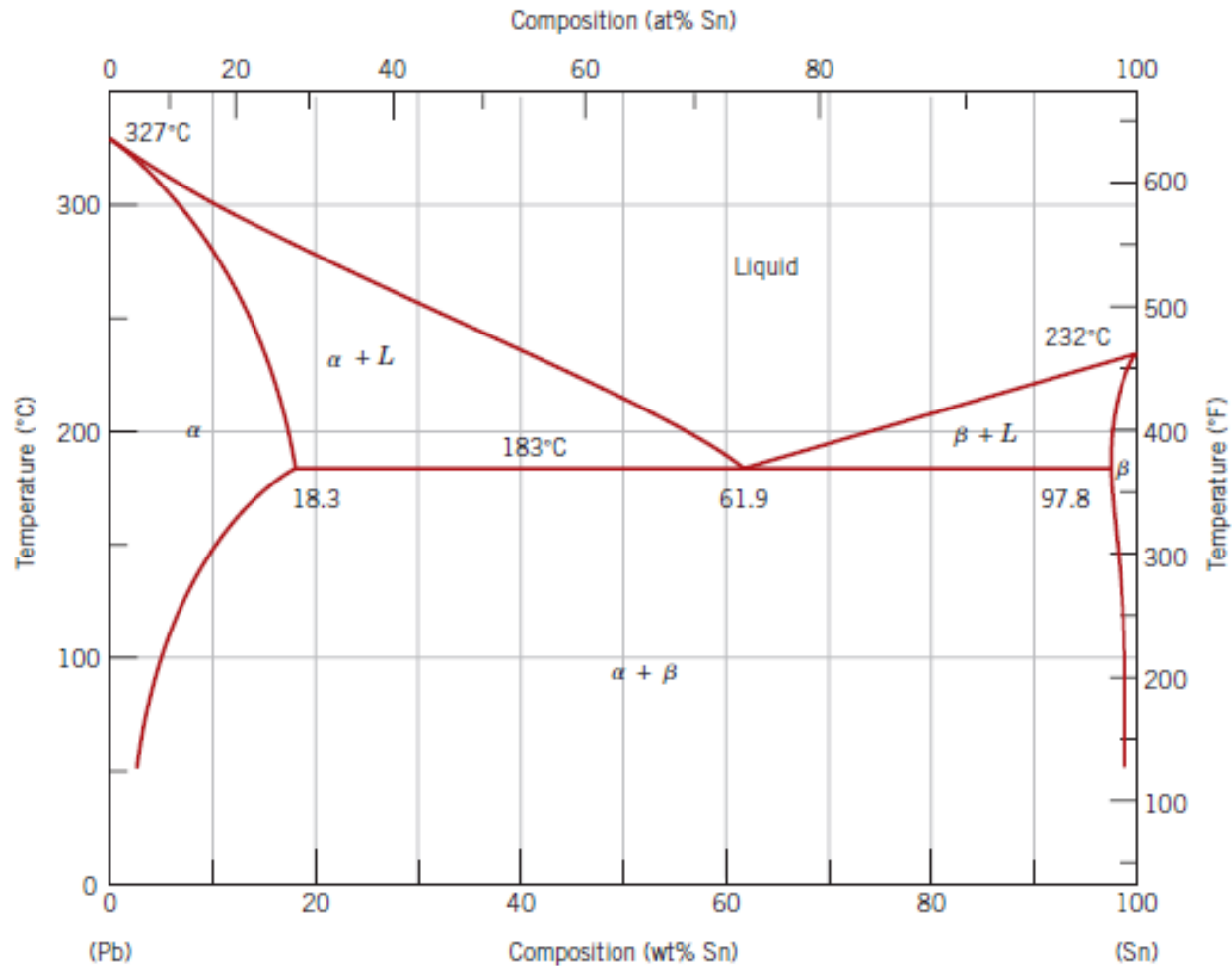
Reação eutética: $L \rightarrow \alpha + \beta$



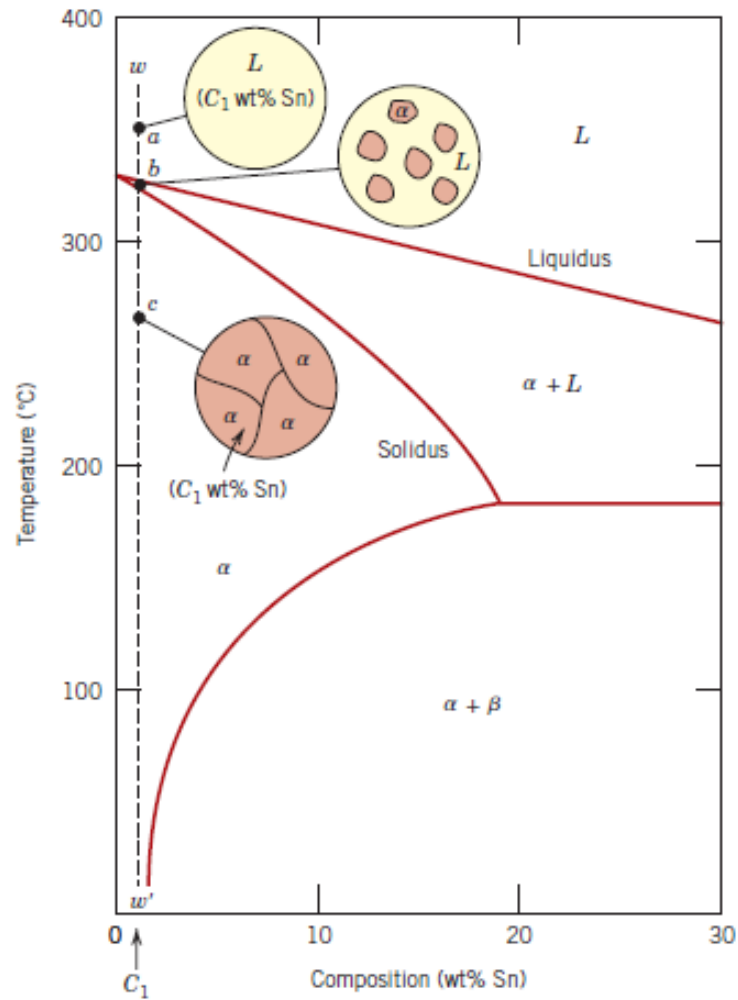
Reação eutética: $L \rightarrow \alpha + \beta$



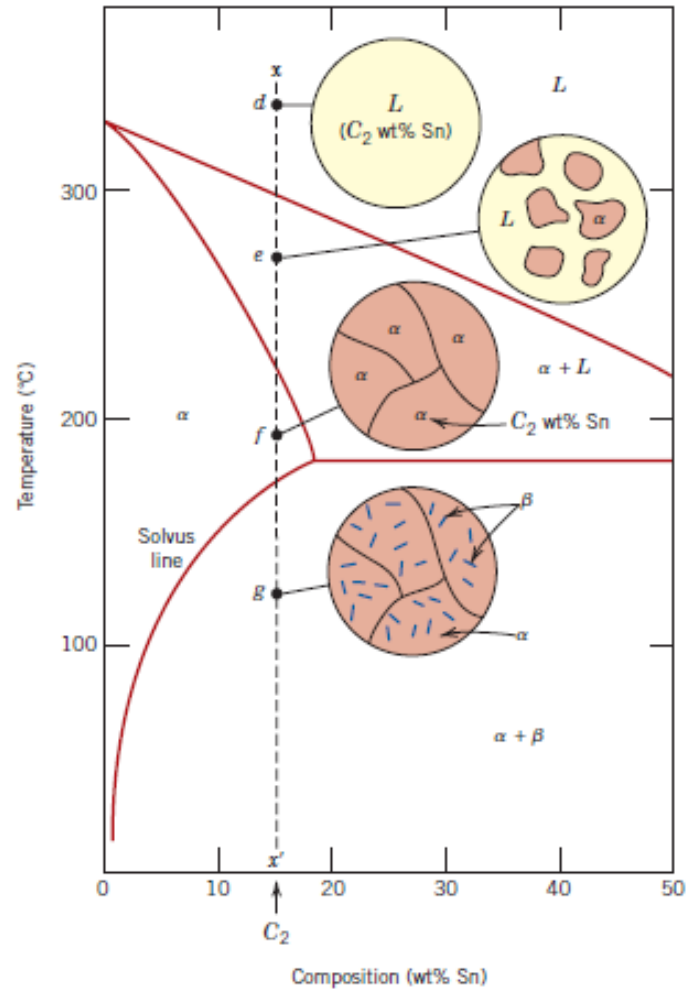
Sistema Pb-Sn



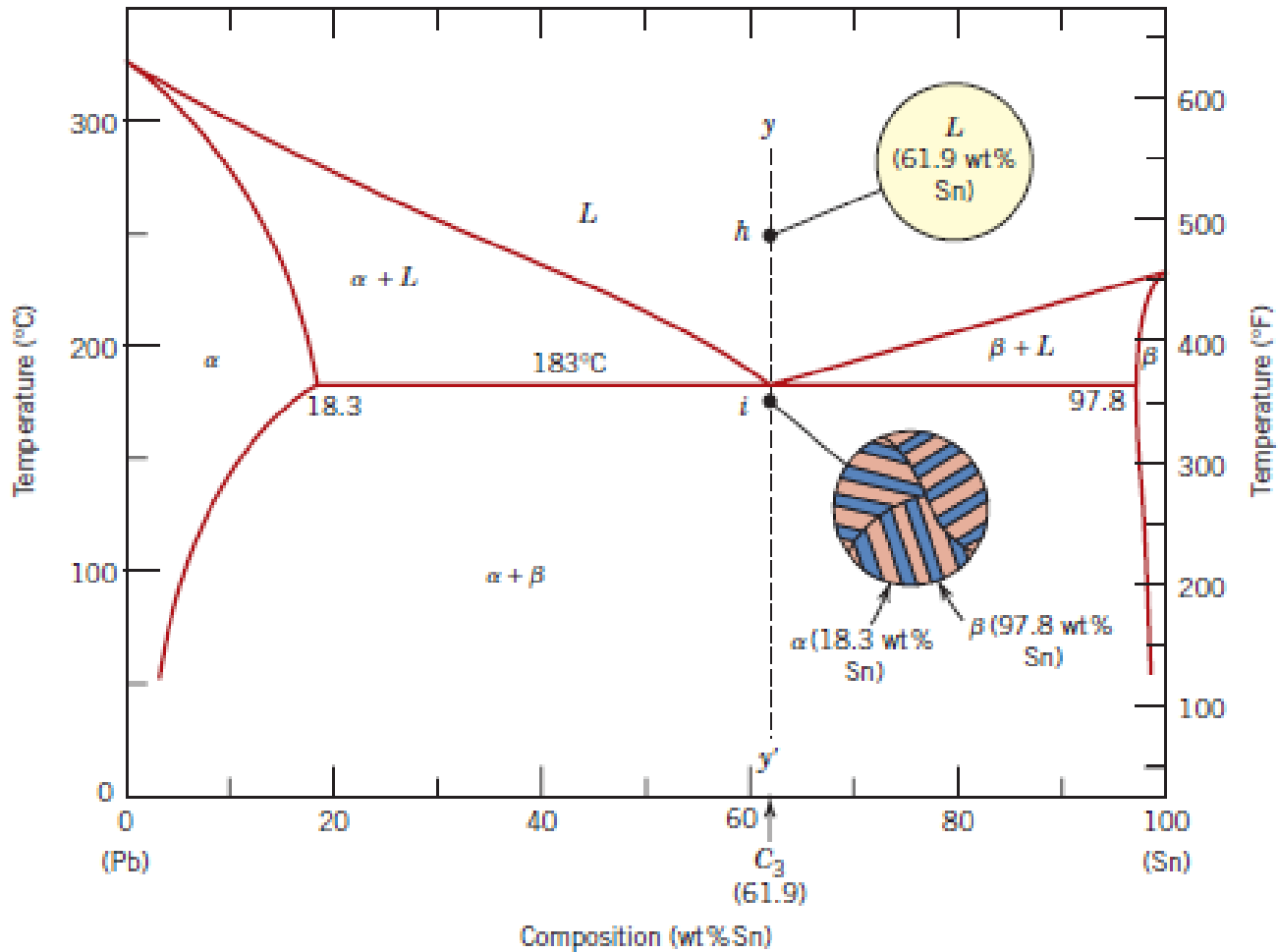
Microestructura – C_1



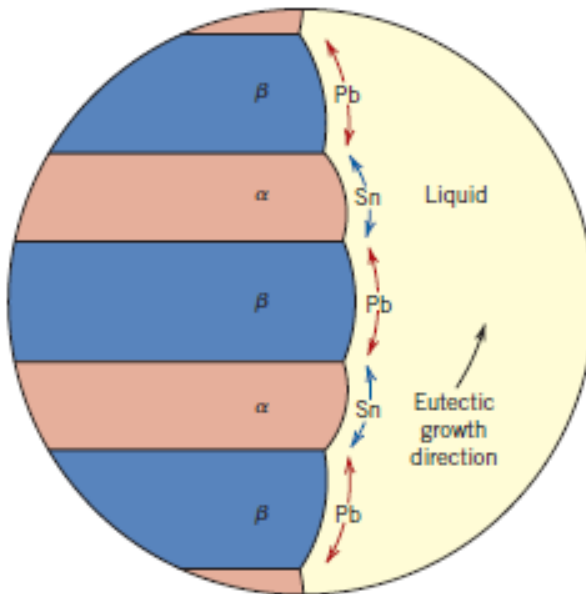
Microestructura – C₂



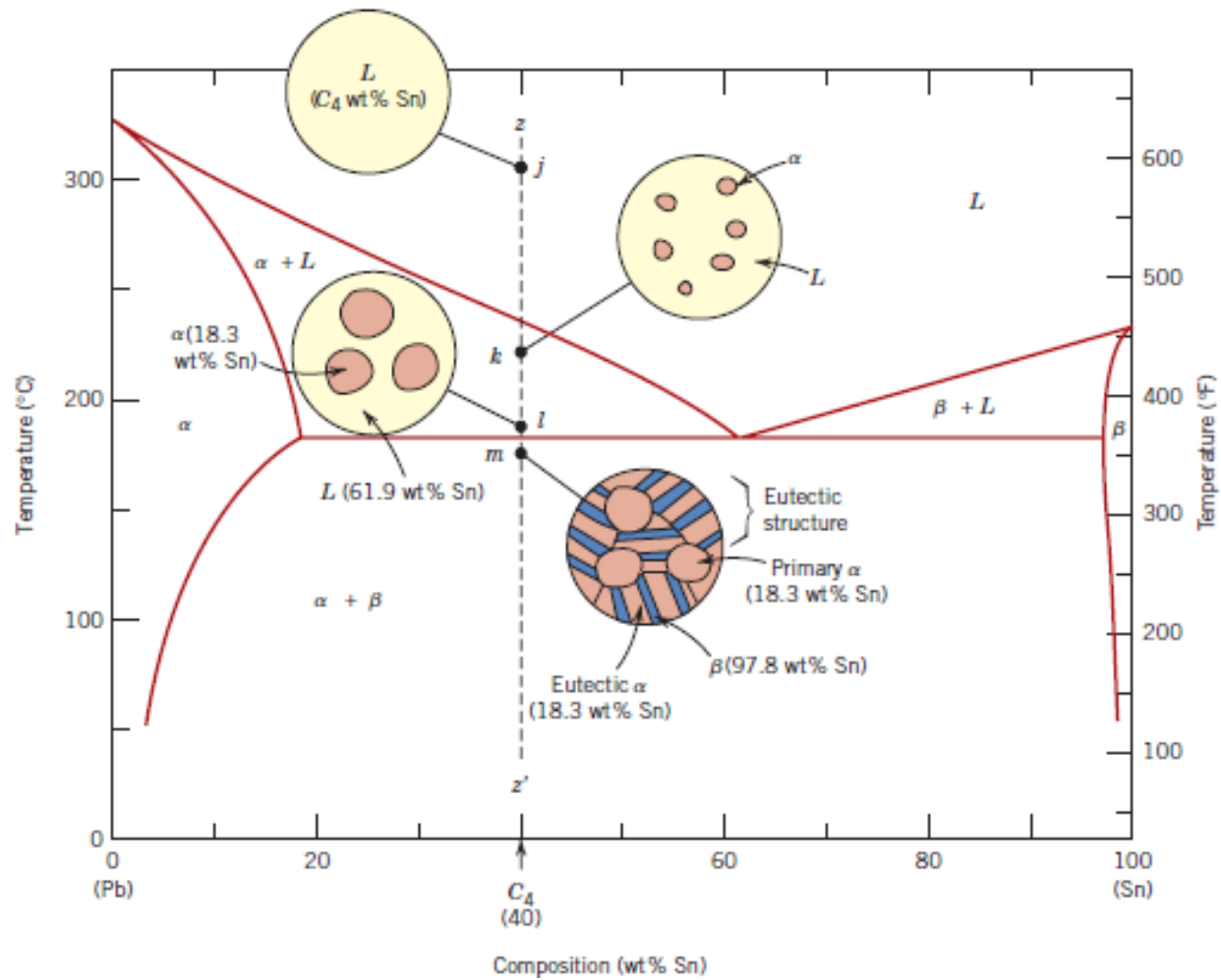
Microestructura – C₃ (eutética)



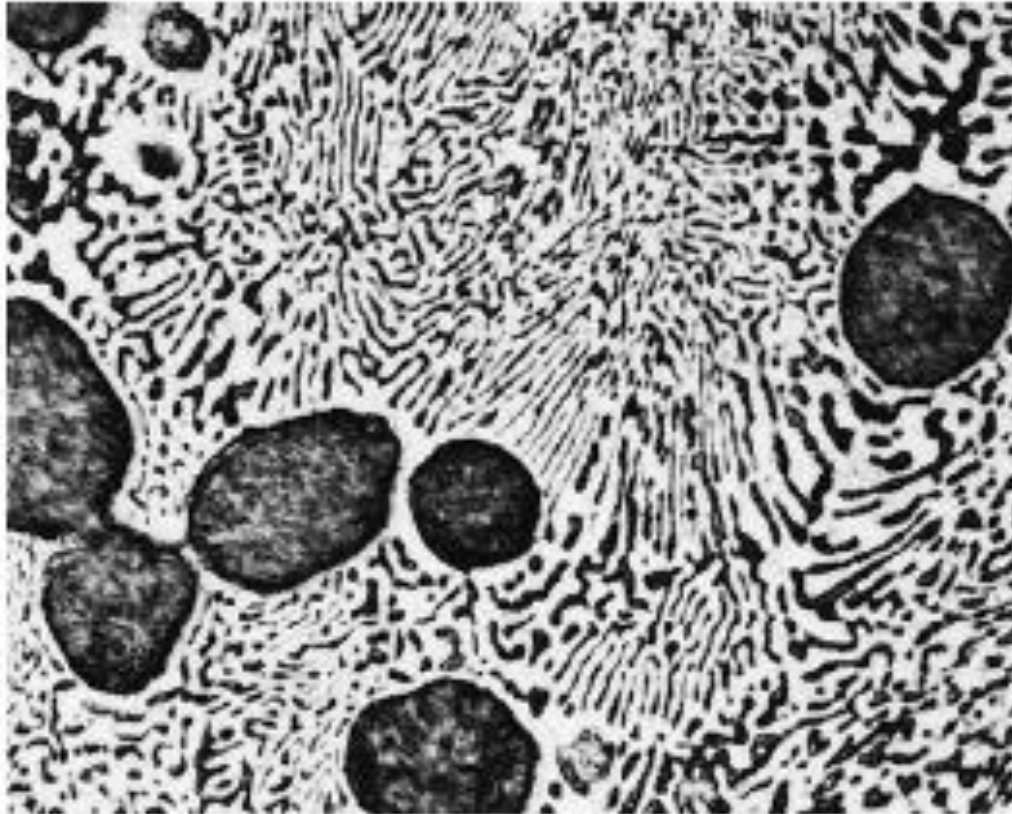
Microestructura – C_3 (eutética)



Microestructura – C₄



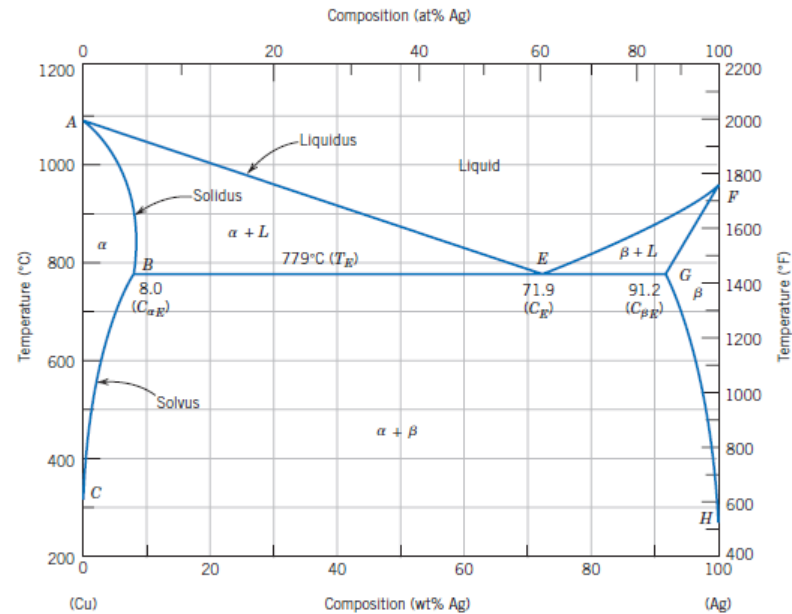
Microeestrutura – C₄

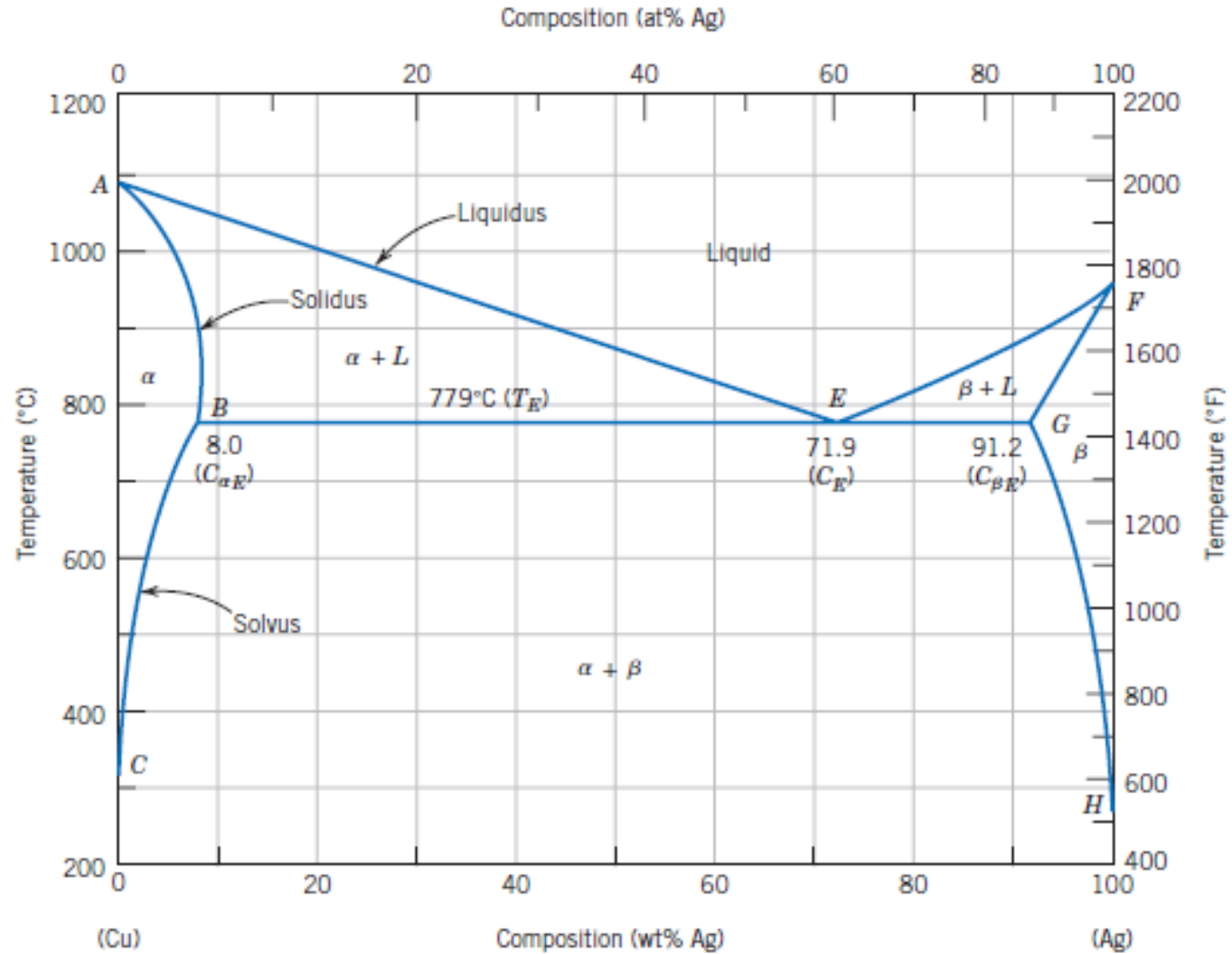


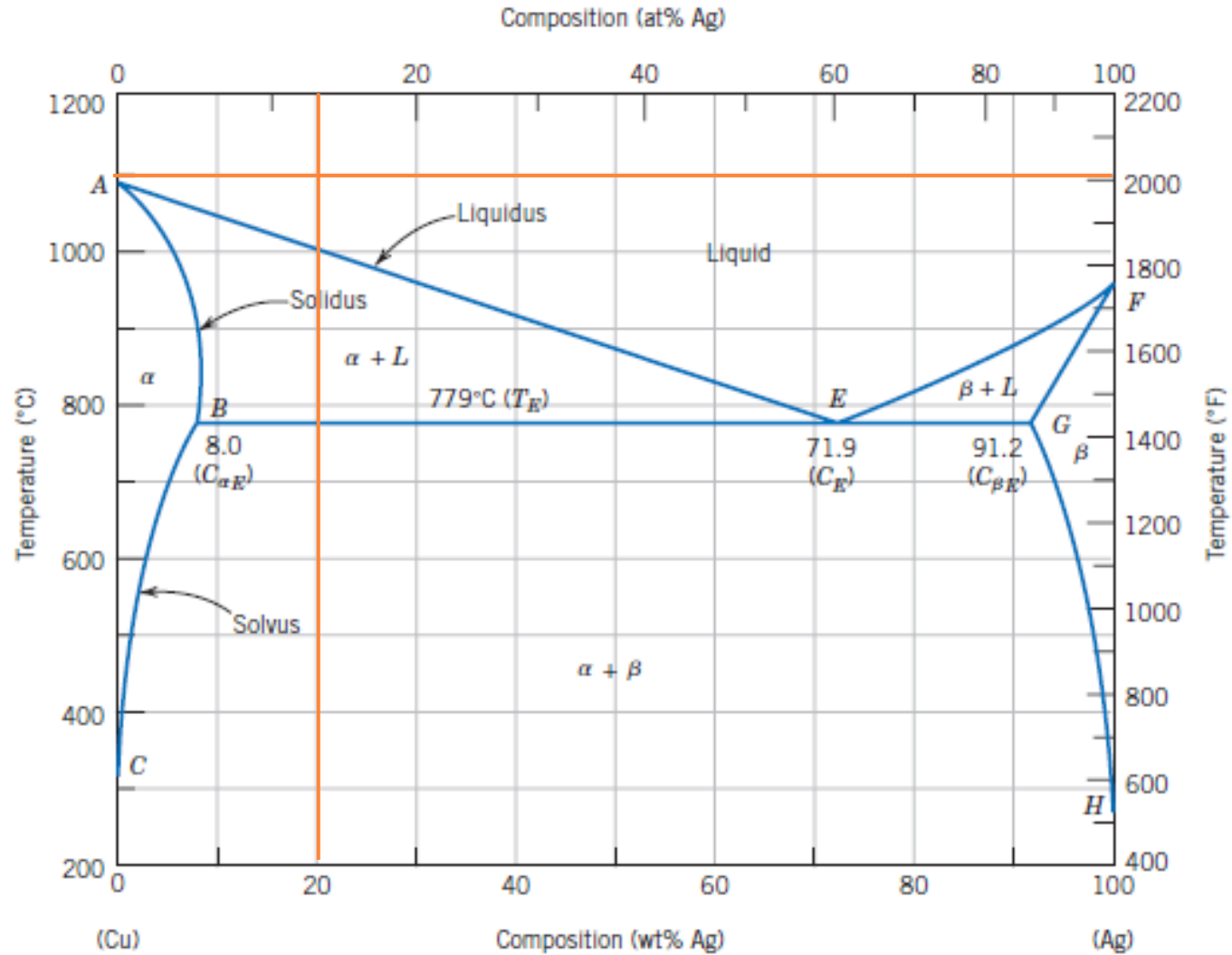
Exercício

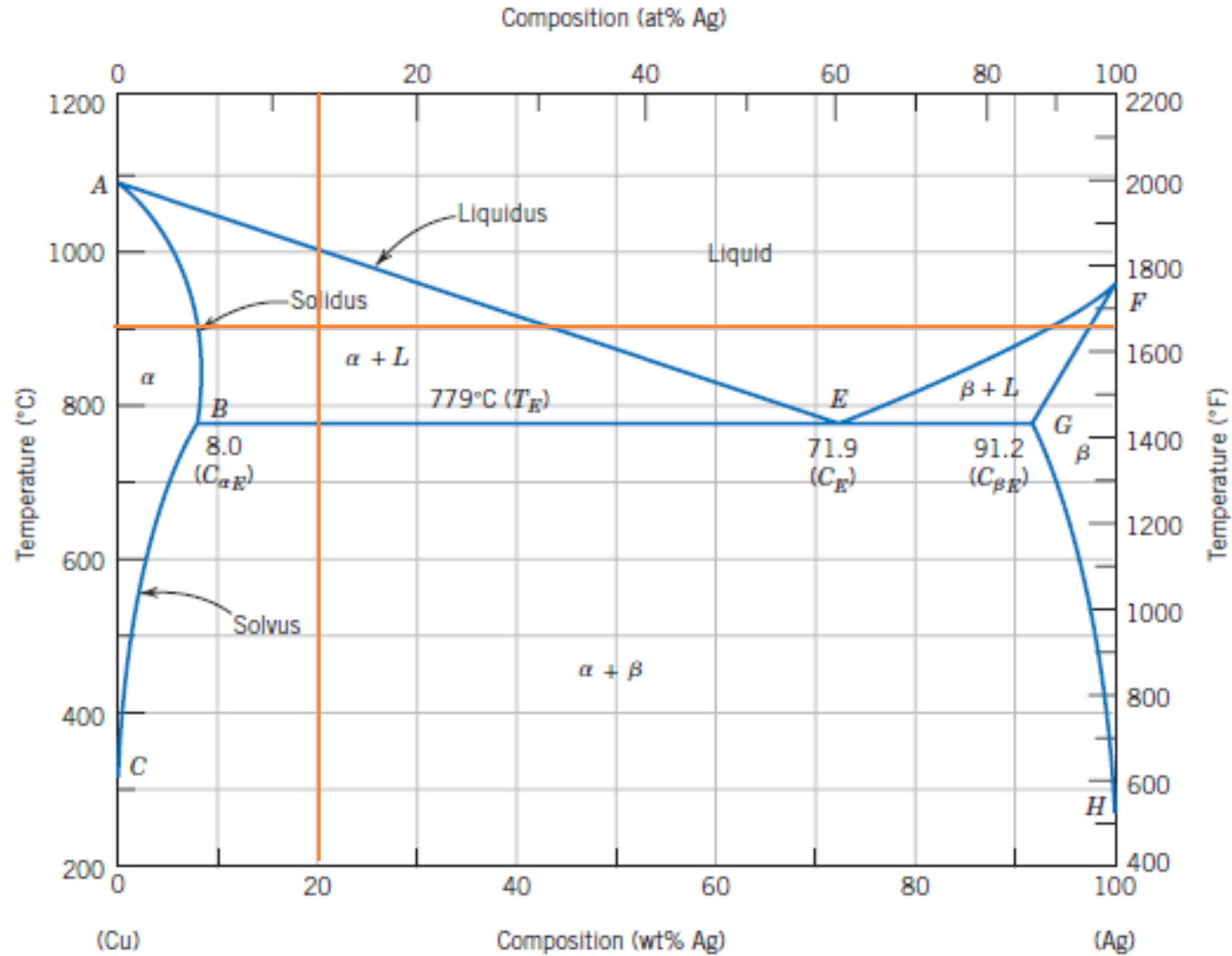
Definir para uma liga 80%Cu-20%Ag, para cada uma das temperaturas abaixo, qual a composição química da(s) fase(s) presente(s), e sua fração em peso,

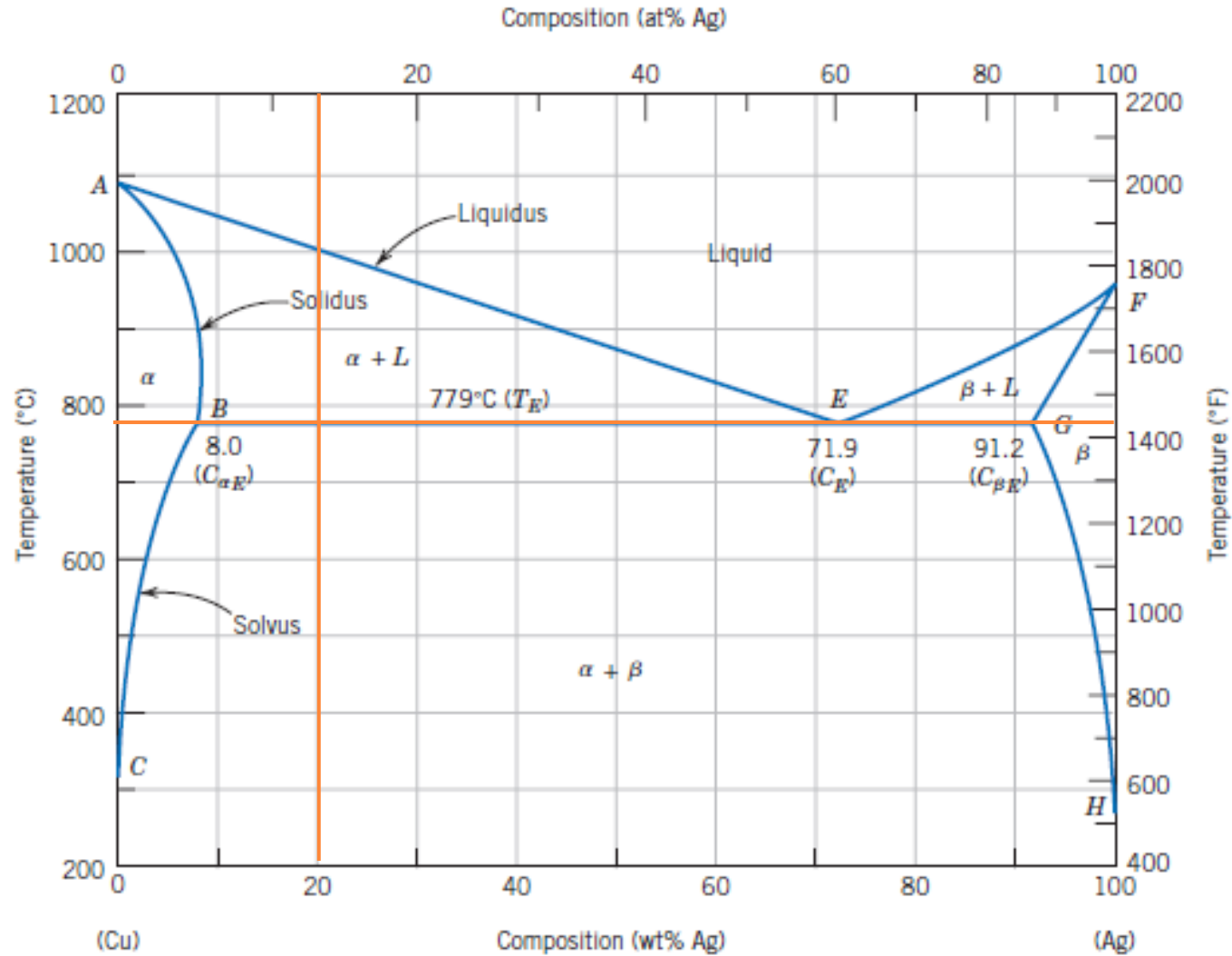
Temperaturas (°C): 1100 °C, 900 °C, 780 °C, 778 °C e 200 °C

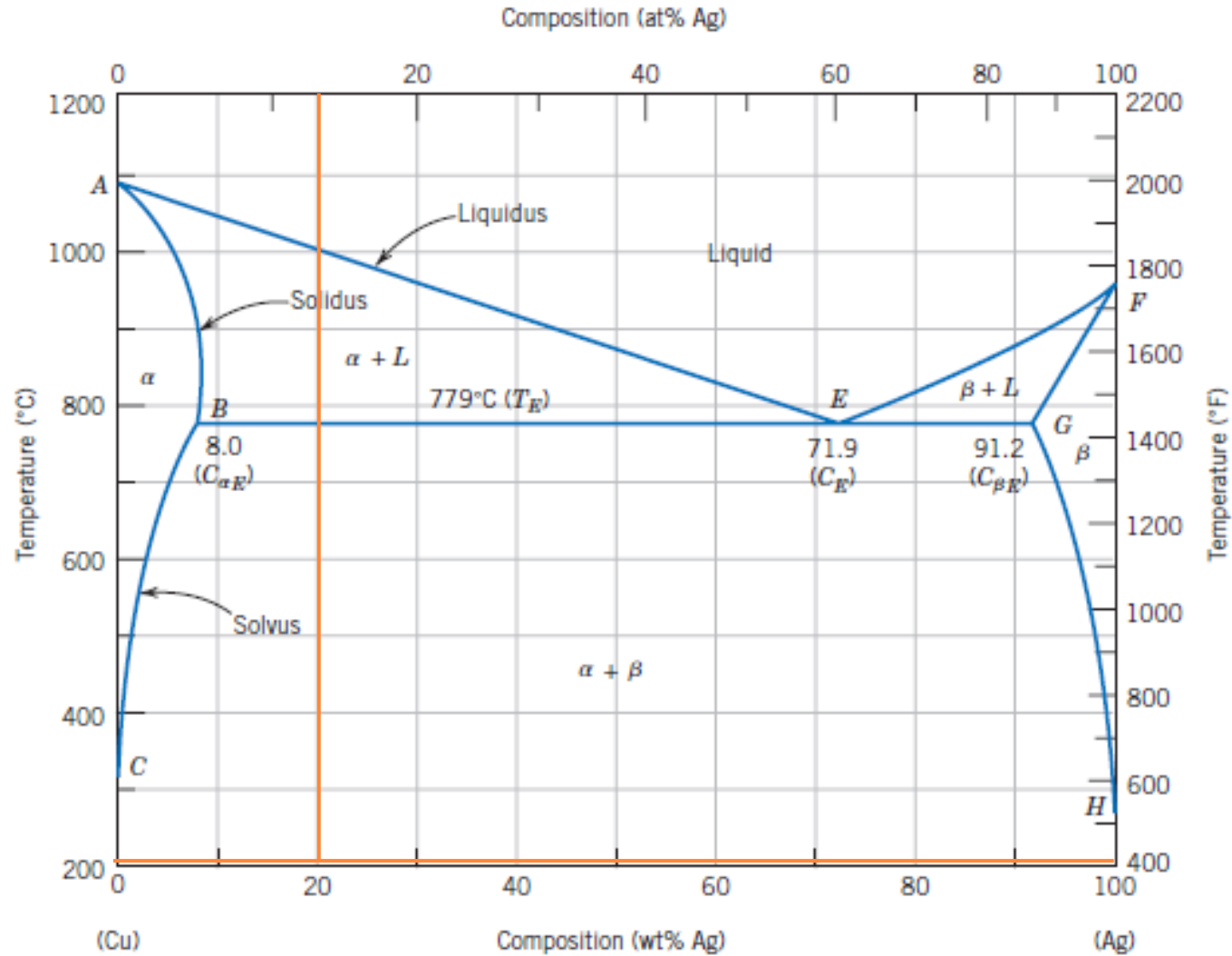












Diagramas eutetóides

