

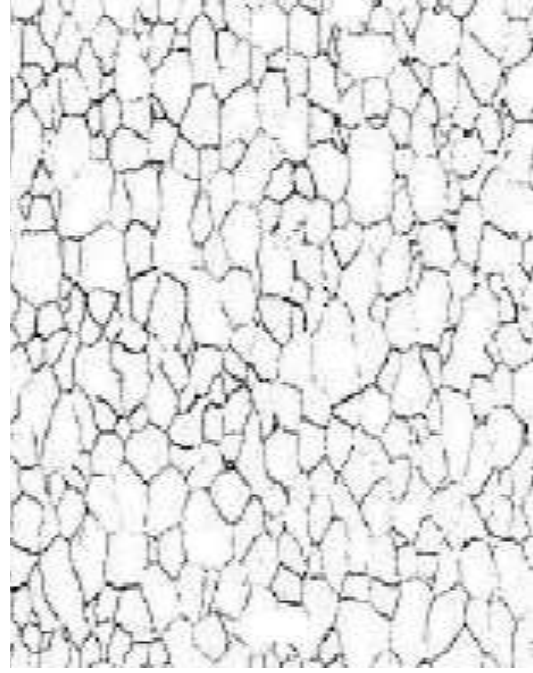


# Micro-Constituents of Iron-Carbon alloys

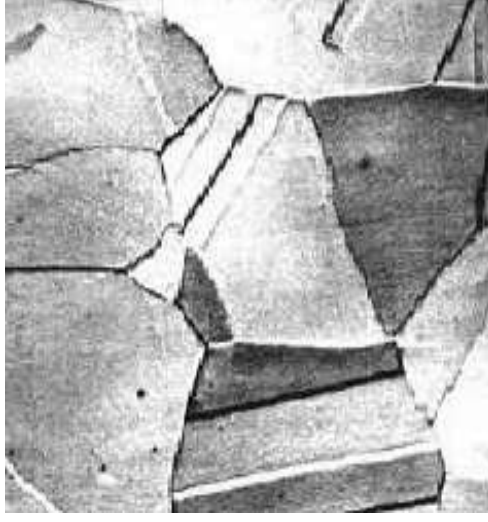


- 1) Ferrite (or  $\alpha$ - iron)
- 2) Austenite (or  $\gamma$ - Iron)
- 3) Cementite ( $\text{Fe}_3\text{C}$ )
- 4) Pearlite ( $\alpha$ - Iron +  $\text{Fe}_3\text{C}$ )
- 5) Ledeburite ( $\gamma$ - Iron +  $\text{Fe}_3\text{C}$ )
- 6) Martensite
- 7) Troosite
- 8) Sorbite
- 9) Bainite

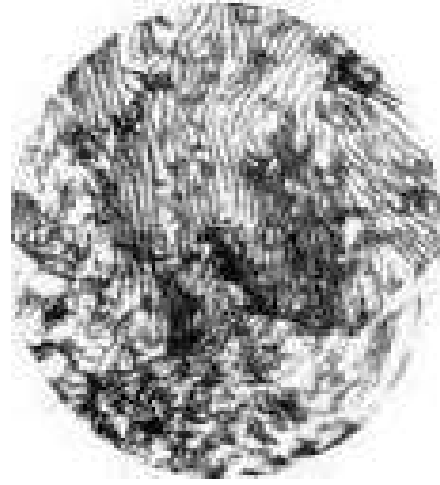
# Micro-Constituents of Iron-Carbon alloys



FERRITE



AUSTENITE



CEMENTITE

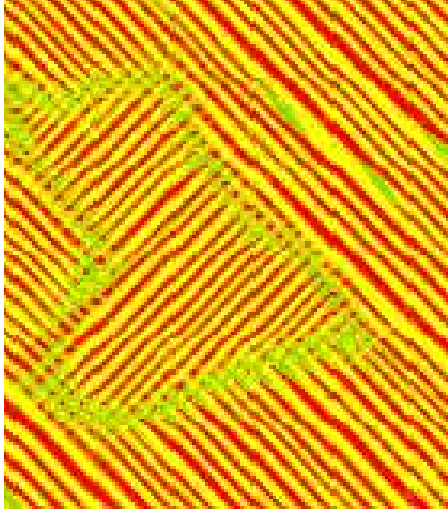


PEARLITE

# Micro-Constituents of Iron-Carbon alloys



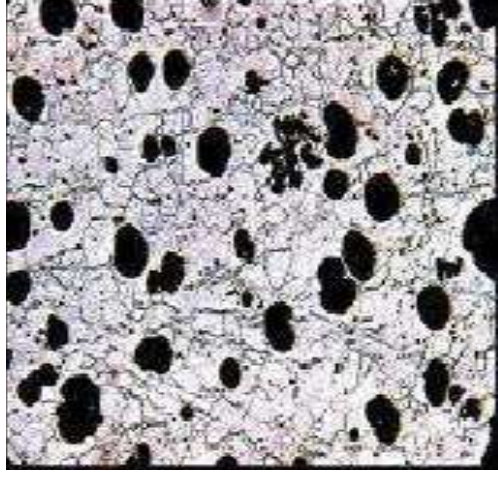
Ledeburite



Martensite



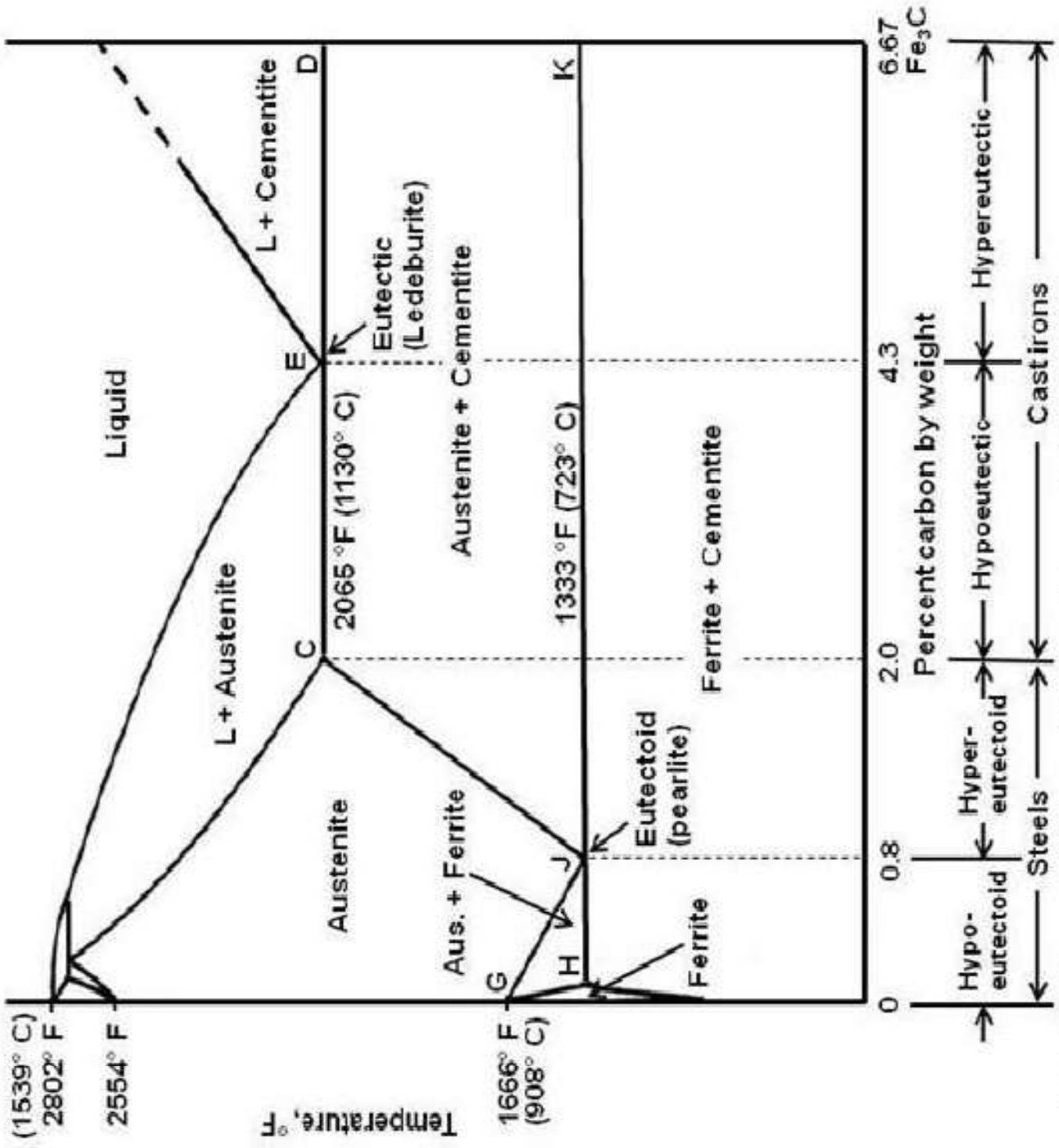
TROOSTITE



SORBITE



BAINITE



The iron-iron carbide equilibrium diagram labeled with common names