Cu

Source of data: JANAF [FCC_A1, LIQUID]
Saunders et al. [BCC_A2, HCP_A3]

Data for Cu in the form of G-HSER

FCC_A1

$-7770.458 + 130.485235\ T - 24.112392\ T\ \ln(T) - 2.65684E\text{-}3\ T^2 + 0.129223E\text{-}6\ T^3 + 52478\ T^{-1}$ *(298.15 < T < 1357.77)*
$-13542.026 + 183.803828\ T - 31.38\ T\ \ln(T) + 3.642E29\ T^{-9}$ *(1357.77 < T < 3200)*

LIQUID

$5194.277 + 120.973331\ T - 24.112392\ T\ \ln(T) - 2.65684E\text{-}3\ T^2 + 0.129223E\text{-}6\ T^3 + 52478\ T^{-1} - 5.849E\text{-}21\ T^7$ *(298.15 < T < 1357.77)*
$-46.545 + 173.881484\ T - 31.38\ T\ \ln(T)$ *(1357.77 < T < 3200)*

BCC_A2

$-3753.458 + 129.230235\ T - 24.112392\ T\ \ln(T) - 2.65684E\text{-}3\ T^2 + 0.129223E\text{-}6\ T^3 + 52478\ T^{-1}$ *(298.15 < T < 1357.77)*
$-9525.026 + 182.548828\ T - 31.38\ T\ \ln(T) + 3.642E29\ T^{-9}$ *(1357.77 < T < 3200)*

HCP_A3

$-7170.458 + 130.685235\ T - 24.112392\ T\ \ln(T) - 2.65684E\text{-}3\ T^2 + 0.129223E\text{-}6\ T^3 + 52478\ T^{-1}$ *(298.15 < T < 1357.77)*
$-12942.026 + 184.003828\ T - 31.38\ T\ \ln(T) + 3.642E29\ T^{-9}$ *(1357.77 < T < 3200)*

Data relative to FCC_A1

LIQUID

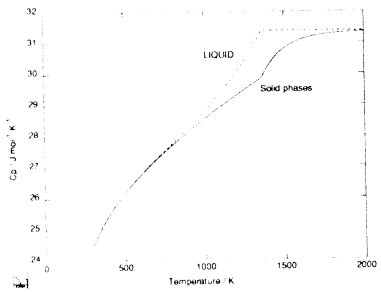
$12964.736 - 9.511904\ T - 5.849E\text{-}21\ T^7$ *(298.15 < T < 1357.77)*
$13495.481 - 9.922344\ T - 3.642E29\ T^{-9}$ *(1357.77 < T < 3200)*

BCC_A2

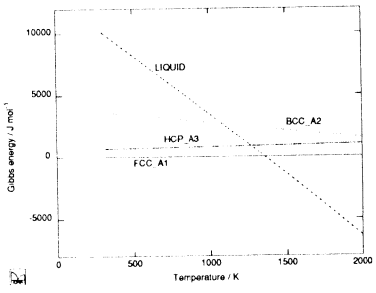
$4017 - 1.255\ T$ *(298.15 < T < 3200)*

HCP_A3

$600 + 0.2\ T$ *(298.15 < T < 3200)*



Heat capacity of Cu



Gibbs energy of phases of Cu relative to FCC_A1