South Dakota School of Mines and Technology

Department of Materials and Metallurgical Engineering

Met 624 Homework #8 Apr 8, 2014

1. Plot the activity of Si in relative to pure liquid Si as a function of both mole fraction and wt% C.
2. Compute the activity coefficient of Si, fSi, at 1 wt% Si.
3. Estimate the value of the interaction coefficient, .

Use date from Ralph Hultgren, Pramod Desai, Donald Hawkins, Molly Gleiser, and Kenneth Kelley:

**Selected Values of Thermodynamic Properties of Binary Alloys**, ASM, Metal Park, OH, 1973.

