

South Dakota School of Mines and Technology  
Department of Materials and Metallurgical Engineering

Met 426/526

Homework

03\_D<sup>eff</sup>

1. Compute the slope of the line in Figure 2.11 (MST&S/Ironmaking) for the 900 °C line assuming that H<sub>2</sub> diffusion in H<sub>2</sub>O vapor through the product layer is rate controlling. Compare to the slope in the figure. Assume  $\varepsilon/T = 0.6$ .