• Applying Equation 2.10 and 2.11 to two strain rates and eliminating $K$, we have:

$$m = \frac{\ln(\frac{\sigma_2}{\sigma_1})}{\ln(\frac{\dot{\varepsilon}_2}{\dot{\varepsilon}_1})}$$  \hspace{1cm} (2.12)

• One can easily obtain $m$ from the strain rate changes in Figure 2-5

• The parameter $m$ is important in accessing the superplasticity of materials
Figure 2-6. Stress-strain curves for AISI 1040 steel subjected to different heat treatments; curves obtained from tensile test.