

Answer on Question #55164 – Chemistry – Other

Question:

What is the formula to get the steam pressure and steam temperature?

Answer:

The relation between steam pressure and steam temperature can be described by the Clausius Clapeyron relation:

$$\frac{dP}{dT} = \frac{L}{T \cdot \Delta v} = \frac{\Delta s}{\Delta v}$$

Where dP/dT – is the slope of the tangent to the coexistence curve at any point;

L – specific latent heat;

T – temperature;

Δs – entropy change of the phase transition;

Δv – specific volume change of the phase transition.