# W4-1-3 Internal energy and enthalpy 3

**Provide the differential expression, $dh$, for the enthalpy by using $du$. What are the variables for the enthalpy?**

The differential expression for $h$ is: $h(s,P) = u + Pv \rightarrow dh = du + d(Pv) = Tds - Pdv + Pdv + vdP = Tds + vdP$.

The variables for the enthalpy are $s$ and $P \rightarrow h(s,P)$.