$H \equiv U[P]$

$U = U(S, V, N_1, N_2, \ldots)$	$H = H(S, P, N_1, N_2, \ldots)$ (5.37)
$-P = \partial U/\partial V$	$V = \partial H/\partial P$ (5.38)
$H = U + PV$	$U = H - PV$ (5.39)
Eliminando U y V se obtiene	Eliminando H y P se obtiene
$H = H(S, P, N_1, N_2, \ldots)$	$U = U(S, V, N_1, N_2, \ldots)$

$$dH = T\,dS + V\,dP + \mu_1\,dN_1 + \mu_2\,dN_2 + \cdots$$

$F \equiv U[T]$

$U = U(S, V, N_1, N_2, \ldots)$	$F = F(T, V, N_1, N_2, \ldots)$ (5.32)
$T = \partial U/\partial S$	$-S = \partial F/\partial T$ (5.33)
$F = U - TS$	$U = F + TS$ (5.34)
Eliminando U y S se obtiene	Eliminando F y T se obtiene
$F = F(T, V, N_1, N_2, \ldots)$	$U = U(S, V, N_1, N_2, \ldots)$

$$dF = -S\,dT - P\,dV + \mu_1\,dN_1 + \mu_2\,dN_2 + \cdots$$

$G \equiv U[T, P]$

$U = U(S, V, N_1, N_2, \ldots)$	$G = G(T, P, N_1, N_2, \ldots)$ (5.42)
$T = \partial U/\partial S$	$-S = \partial G/\partial T$ (5.43)
$-P = \partial U/\partial V$	$V = \partial G/\partial P$ (5.44)
$G = U - TS + PV$	$U = G + TS - PV$ (5.45)
Eliminando U, S y V se obtiene	Eliminando G, T y P se obtiene
$G = G(T, P, N_1, N_2, \ldots)$	$U = U(S, V, N_1, N_2, \ldots)$

$$dG = -S\,dT + V\,dP + \mu_1\,dN_1 + \mu_2\,dN_2 + \cdots$$