lated industries. Since the correlations are in analytical form, they can easily be implemented in an electronic computer. Critical temperatures and critical volumes are of particular interest in establishing techniques for analyzing and correlating high-pressure vapor-liquid equilibria in the critical region, as discussed in the previous paper.

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NOTATION

a, b = constants in Redlich-Kwong equation of state
k_{ij} = characteristic constant for i-j interaction
P = pressure
P_{c_i} = critical pressure of component i
P_{cT} = critical pressure of a mixture
R = gas constant
T = temperature
T_{c_i} = critical temperature of component i
$T_{c_{ij}}$ = characteristic temperature of i-j interaction
T_{cT} = critical temperature of a mixture
v = molar volume
v_{c_i} = critical volume of component i
v_{cT} = critical volume of a mixture
x = mole fraction

Greek Letters

θ = surface fraction
τ_{ij} = correlating parameter for critical temperature
ν_{ij} = correlating parameter for critical volume
ω = acentric factor
Ω_a, Ω_b = dimensionless constants in Redlich-Kwong equation, as given by Equations (9) and (8)

Subscripts

c = critical
i, ii = pure component i
ij = i-j pair
M = mixture

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